

Aaron Bollinger

Education

MFA in Technical Design and Production at the Yale School of Drama
Yale University, New Haven, CT September 2006
Thesis: Production Planning Database for Technical Directors: Ashomen
Thesis supervisor: William Reynolds

BFA in Technical Theater / Design August 1999
University of Central Florida, Orlando, FL

Academic Employment

Point Park University - Conservatory of Performing Arts	Pittsburgh, PA
Department Chair	2017-Present
Associate Professor (Tenured)	2014-Present
Head of Theatre Production	2014-2017, 2020-Present
Assistant Professor (Tenure Track)	2010-2014
Coordinator of Technical Theatre/Design and Stage Management	2010-2011, 2013-2014

Description

The Theatre Department of the Conservatory of Performing Arts offers 6 BFA degrees in Acting, Musical Theatre, Theatre Arts, and Theatre Production: Design, Stage Management, or Technical Design & Management. They also offer a BA in Theatre Arts: Performance & Practices. The students work alongside the professionals of the award winning and newly constructed Pittsburgh Playhouse. The students find a balance between intensive classes and hands on training in many of the 14-18 productions between multiple companies that are produced by Playhouse.

Responsibilities as Department Chair

- Service/Responsibility to Students
 - Provide the highest quality instruction
 - Focus on students successfully completing their chosen programs
 - Resolve student academic issues
- Service/Responsibility to Faculty
 - Encourage current and new faculty professional development
 - Advocate for quality teaching, scholarship, and service
 - Create a departmental culture of transparency, collegiality, and trust
 - Oversee the curriculum - including items such as curriculum development and update, course schedule, class size, and sequence of courses
 - Work closely with Human Resources to manage the part-time and full-time faculty contracts
- Service/Responsibility to Your Department
 - Fulfill the Mission of the University
 - Use decision making strategies to answer departmental questions
 - Supervise Assistant to the Chair, Coordinators, and Directors
 - Manage the departmental resources including the budget

- Adhere to all university policies
- Support efforts of assessment and accreditation
- Work closely with Enrollment Management on student recruitment including such activities as Pioneer Experience, Open House, and high school outreach
- Coordinate with Alumni Relations a plan to keep graduates involved in the University
- Service/Responsibility to Your Self
 - Maintain your teaching, scholarship, and service
 - Pay attention to your physical and mental health
 - Balance the urgent and the important
 - Make time for family/significant others

Responsibilities as a Faculty Member

- Teach 12 credit hours of classes per semester.
- Advise all technical theatre and stage management students.
- Recruit students for the program.
- Mentor the technical theatre students.
- Involved in committee work through the school and university.

Florida State University – School of Theatre

Tallahassee, FL

Assistant Professor of Technical Production (Tenure Track)

2006-2010

Description

The School of Theatre Technical Production program is a graduate program that provides students with the opportunity to learn managerial and technical expertise through the classroom and develop these skills through productions. The students are the technical direction work force for the seven to eight main stage and thesis productions a year, which are produced in multiple venues. The Technical Production graduate program consists of ten to twelve graduate students and five supporting faculty and staff.

Responsibilities

- Teach three graduate level courses per semester.
- Assist the program head with recruiting.
- Supervise students in their assigned production positions.
- Mentor the technical production students.
- Maintain research and creative activity to demonstrate professional viability.
- Participate in many committees to further the progress of the department.
- Oversee and maintain the Electro-Mechanical Lab.
 - Obtain required equipment and materials through grants.
 - Arrange the room to function as our main lab and lecturing classroom.

Adjunct Assistant Professor of Technical Production

2011-Present

Description

The department felt there were needs for certain classes in which they didn't have the faculty to fill those roles. I was asked to come on board and teach classes remotely via the internet on certain topics. I am located nearly a thousand miles away so was required to conduct an on-line course which was a combination of digital projects, self-prepared video tutorials, and video conferencing.

Responsibilities

- Find the means and software to conduct the courses.
- Teach Computer Applications for Technical Directors.
 - This course covered AutoCAD and Excel.

- Co-Teach Electricity and Electronics.

Elon University Performing Arts Dept. / The Fine Arts Center

Administrative Staff/ Assistant Technical Director

Elon, NC

1999-2003

Description

Elon University Performing Arts Department produces musicals and plays throughout the year in two facilities. One is a large proscenium space with a fly system, trap room, and orchestra pit. The other is a flexible black box theater. Both are equipped with state of the art lighting and sound equipment. Scenery is built in a moderately sized shop adjoined to the theaters. The Fine Arts Center provides for Admissions Department events, tours, speakers, performing artists, and plays as well as dance, musical, and orchestral productions.

Responsibilities as Assistant Technical Director for the Performing Arts Department

- Assist in technical decisions
- Build and install scenery
- Install lighting.
- Sound designer for department productions. (10+ shows)
- Supervise and mentor students.
- Train students in steel and wood construction, rigging, electrics, sound engineering, and running shows.
- Work within production budgets.
- Maintain the following spaces and all equipment within:
 - A 572 seat proscenium theater.
 - A fully outfitted black box theater.
 - A fully functional scene shop.
 - Manual and Computer aided drafting labs.
 - On and off site storage facilities for the Performing Arts Department.

Responsibilities as Assistant Technical Director for the Fine Arts Center

- Support the Technical Director for all events in the Fine Arts Center including: touring productions, music department productions, Department of Admissions events, lectures, facilities rentals and other campus activities.
- Collaborate with Dean of Cultural Programs regarding outside productions.
- Collaborate with other departments and outside production companies to assess technical needs.
- Supervise student and hired workers.

Yale Repertory Theatre (YRT)

Associate Production Supervisor (APS)

New Haven, CT

2004-2005

Description

The Associate Production Supervisor position acts as a liaison between the Production Supervisor and the production team. Six Yale Repertory Theatre productions (LORT D), three Yale School of Drama productions, one Second Year Acting Project, four Playwright Thesis Projects, three Verse Projects, six Collaborative Workshop Projects, and one First Year Acting Projects are divided up amongst four Associate Production Supervisors throughout the course of each year. The involvement of the APS on each show can vary greatly depending on the type of production. This position requires managing a large number of professional staff, faculty, and students in their production rolls.

Responsibilities

- Coordinate and/or assist in coordinating inter-departmental activities, as well as space and equipment use for all production areas.
- Set-up and Chair/attend design, budgeting, production, and strike meetings.
- Provide technical support for each production team, insuring in particular that safety guidelines and School policies are followed.
- Resolve conflicts about space and equipment use.
- Disseminate the approved materials and labor budgets.
- Produce a calendar of events for the load-in/tech/dress period.
- Schedule a fire inspection with the New Haven fire marshal prior to each production's first public performance.
- For strike, insure that all performance and storage spaces are cleaned and organized as well as organize proper waste removal.
- Work on and assist in yearly planning and paperwork.
 - Updating the Production Handbook.
 - Assembling preliminary production calendars for the following year.
 - Updating staffing charts and labor profiles to coordinate with the preliminary production calendars.

Assistant Technical Director for *Brundibar and Comedy on the Bridge* 2005

Description

Brundibar and Comedy on the Bridge is a co-production between Yale Repertory Theater, Berkeley Repertory Theater, and New Victory Theater. The scenery was built by Adirondack Studios, Argyle, NY. Preproduction for the YRT required adjusting the space to accommodate the scenery. It also demanded a temporary loading dock be constructed to unload a 53' truck. The opera required important communication between departments due to space constrictions for lighting and sound equipment, an added orchestra pit, scenic units, and a cast of more than forty performers.

Responsibilities

- Keep the ground plan, section, and fly schedule up to date with changes from all departments.
- Technically design the orchestra pit wall.
- Assemble all chain-motor needs and rigging hardware.
- Manage a crew of four professional carpenters in build and load-in.

Assistant Technical Director for *Rothschild's Fiddle* 2003

Description

Rothschild's Fiddle was a production directed by Kama Ginkas and featured a cast from MTYZ Theatre/ Moscow New Generation Theatre from Russia. The design called for a live 3,000lb tree in the center of the stage and flawless carpentry of houses, coffins, boats, and canoes made of raw lumber. Interpreters were used to effectively communicate the Russian design team.

Responsibilities

- Track all purchases and requisitions.
- Technically design scenic units.
- Manage a crew of four professional carpenters.
- Supervise and assist student labor in the construction and installation of scenery.

Projections Engineer for *The Cherry Orchard* 2005

Description

The lighting designer, Michael Chybowski, requested animation projected across the set. The images desired were based off a still image from the set designer's backdrop

elevations. Equipment and software used: A Christie Projector, WatchOut, Shockwave Flash, and Photoshop.

Responsibilities

- Learn new software in order to construct animations.
- Create and alter images as desired by lighting designer.
- Set up needed equipment.

Projections Engineer for *The Clean House*

2004

Description

The Clean House required selected written stage direction to be projected in different location across multiple backdrops. The job needed both Christie and Sony Projectors.

Responsibilities

- Determine the appropriate equipment and programs needed.
- Construct sound dampening projection boxes that mount to the balcony rail.
- Build projected images.

Teaching Experience

Point Park University – Conservatory of Performing Arts:

PROD 113, Stage Operations

An introduction to the technical aspects and operation of the stage. This includes types of venues, organizational structures, and backstage operations. The focus of skills learned in this class will be how to run a show, rigging, basic trouble shooting and repair in the areas of scenery, scenic art, lighting, sound, and wardrobe.

PROD 140, Theatre Safety

A study of theatre safety and occupational health. The course covers fire prevention, chemical safety, risk assessment, emergency procedures, code requirements, and CPR/First aid.

PROD 142, Drafting and CAD

An introduction to the proper material, methods, and techniques for communicating settings, properties and working drawings through technical draftings. The course will combine the skills of hand drafting and computer aided drafting software to teach the reading and creation of professional quality plates. Designed for beginning students in technical theatre.

PROD 212, Computer Applications for Managers

Basic to advanced use of general managerial software that is commonly used in entertainment. Emphasis is given to special techniques and efficient use of word processors, spreadsheets, databases, etc.

PROD 213, Carpentry for the Theatre

Discussion of common construction methods used in the theatre and practical application of techniques in woodworking.

PROD 222, Computer Applications for Designers

Basic to advanced use of general Design software including Adobe Photoshop and Adobe Muse. Emphasis is given to image import, manipulation and composition. The course aims to enable the student to create visual supported presentations (portfolio) on the computer.

PROD 313, Technical Design

Discussion and practical applications of techniques and methodology related to engineering a designer's concept. Students will look at design specifications, concepts designs, detail designs, and design for manufacture based in the reality of time, budget and labor.

PROD 361, Advanced CAD

A continuation of PROD 142 that focuses on the 3D drafting, renderings, materials, lighting, animations and customizing tools.

PROD 363, Automation

The practical applications and theories of the motion of moving scenery, be it moving wagons, turntables, or lifts. Beginning with the fundamentals of physics and Newton's Laws to the practical use of these theories by studying motors, winches, turntables, lifts, and other mechanisms for the stage. The course also focuses on the process of mechanical design for temporary and permanent stage machinery. Topics include design considerations, component selection, construction methods, and safety.

PROD 392, Video Production

This course is an exploration of video and projected design for the stage. The course will investigate the technical and engineering aspects of playback and projections as well as the design considerations within a production.

PROD 400/401, Senior Project I/II

Each B.F.A. student will be assigned a senior project. Projects will be assigned at the discretion of the technical theatre Unit. These projects may include; Designer, Technical Director, Stage Manager, department manager or equivalent for a Pittsburgh Playhouse production or an undergraduate thesis. Students are required to research and critically analyze the project showing the student's mastery of critical thinking.

PROD 403, Technical Direction

This class puts in focus everything a student has learned for technical theatre and shows the student how to merge all the processes together. Participants will learn how to supervise workers, estimate and budget shows, create a plan of execution for creating a set and keeping records of the production.

PROD 440, Production Management

The course is designed to be an overview of the function of Production Management in the performing arts and all its facets. Budgeting, scheduling, theatre systems, etc. especially in relationship to working with administrative personnel and creative artists.

PROD 440, Professional Preparation for Design/Tech

In this class the students will study the content and presentation forms of the theatre artist portfolio, resume and cover letter. The student will also advance his/her interview skills. Ultimately, the intention of this course is to get the student's presentation package ready for future job applications.

THEA103, Introduction to Drafting

An introduction to the proper material, methods and techniques for creating sketches, settings, properties, working drawings, sections and schematics. Designed for beginning students in technical theatre.

THEA109, Elements of Stagecraft

The students are introduced to technical problems of stage production such as scene construction and painting, stage lighting and equipment and costume construction in laboratory and the process to resolve these issues. This course requires the students to utilize a vocabulary of names and terminology common to theatre professionals allowing concise communication between members of the design and production teams.

THEA110, Carpentry

This class uses discussion and practical application to explore advanced techniques in Woodworking, Metal working and other commonly used scenic materials. This includes emphasizing safety and health related issues to each student as they relate to materials and working conditions in all areas of technical theater.

THEA233, CAD/CAM for the Theatre

An introductory course in the techniques of computer aided drafting for use in the theatre. This course looks at the basics of AutoCAD and advancing the skills of the students in other management programs like Excel.

THEA234, Advanced CAD

An in-depth look at the uses of AutoCAD, while learning the skills of three dimensional drafting and LISP programming. The students fine tune their skills of communication and speed of drafting.

THEA262, Advanced Scenery Construction

Discussion and practical application of techniques and methodology related to specialized scenic machinery and components. A focus is put on structural design and material choices.

THEA395, Automation 101

This course begins with fundamentals of physics and Newton's Laws. Understanding these dynamics will help us predict and understand the motion of moving scenery, be it moving wagons, turntables, or lifts. The class then moves on to the practical use of these theories by studying motors, winches, turntables, lifts, and other mechanisms for the stage. It also focuses on the process of mechanical design for temporary and permanent stage machinery. Topics include design considerations, component selection, construction methods, and safety.

THEA331, Production Management

This class introduces the student to the many responsibilities of a Production Managers position. Covered topics are associated with the management of a performance venue, i.e., scheduling, hiring, contracts, crisis management, box office operations and management styles.

THEA395, Production Resource Management

This course focuses on the planning and management skills and tools necessary for Technical and Production Managers. Discussions will include the roll of the manager in regards to responsibility, planning, and facilities utilization; and close look at skills dealing with organizational principles, fiscal controls, cost and time estimating, scheduling, and purchasing for all phases of production.

THEA395, Inventor for the Stage

This course focuses learning the use of Autodesk Inventor for design and communication of stage machinery. This course continues the curriculum learned in Automations 101 and explores how this software can aid in the design process of machinery.

THEA395, Theatre Safety

A study of theatre safety and occupational health. The course covers fire prevention, chemical safety, risk assessment, emergency procedures, code requirements, and CPR/First aid certification.

THEA395, Production Administration – Honors Level

This course focuses on the planning and management skills necessary for Stage, Production and Facility Managers in regards to labor management. Discussions will

include the roll of the manager in regards to fiscal and time management of the labor force; and close look at skills dealing with leadership and motivational factors in a production process.

THEA450, Portfolio and Interview

The students study the content and presentation forms of the theatre artist portfolio, resume and cover letter. The students also advance his/her interview skills. Ultimately, the intention of this course is to get the student's presentation package ready for future job applications.

THEA453, Technical Direction

This class puts in focus everything a student has learned for technical theatre and shows the student how to merge all the processes together. Participants will learn how to supervise workers, estimate and budget shows, create a plan of execution for creating a set and keeping records of the production.

THEA460/461, Senior Project 1&2

Each B.F.A student is assigned a senior project. Projects are chosen at the discretion of the technical theatre faculty. Students are required to research and critically analyze the project and reflect of his/her performance. The objective of this class is to support the student in the analytical process and give practical instruction.

Florida State University – School of Theatre:

TPA5278, Electricity and Electronics

This course explores the basics of electricity as it is used in industry of live entertainment. This includes the usefulness, power, and hazards that this can present. The class covers segments of the laws, codes, regulations, and inspections that are covered by OSHA and the National Electric Code (NEC). Also, it encompass more specific information pertaining to stage use of lighting, sound, projections, electronics, and motors. The class consists of lectures and labs.

TPA5315, Physics of Stage Machinery

The course begins with fundamentals of physics and Newton's Laws. Understanding these dynamics helps the students predict and understand the motion of moving scenery, be it moving wagons, turntables, or lifts. The class then moves on to the practical use of these theories by studying motors, winches, turntables, lifts, and other mechanisms for the stage.

TPA5280, Technical Production Practicum

The purpose of this course is to keep an open dialogue with the students as they perform in certain technical roles on current productions. Here we discuss current issues and achievements that are discovered week to week. This also prompts discussions about future goals for productions at the school as well as their professional roles in technical support for entertainment.

TPA5089, Computer Applications for Technical Directors

This course explores the basics computer aided drafting and spreadsheet programming focusing on developing the skills of communicating technical information. Students learn how to navigate and use AutoCAD with proficiency to complete working drawings for construction and collaboration related to theater. They also learn general spreadsheet formatting, formulas, and troubleshooting for resource estimating and tracking. (an On-line Course)

TPA5089, Advanced Technical Drafting

This is an intensive course of computer aided drafting focusing on developing the skills of communicating technical information properly in draftings. Students will also learn how

to navigate and use AutoCAD with proficiency to complete work related to theater. By the completion of the course, the students will be able to create technical plots and renderings according to drafting standards. They will be able to efficiently use AutoCAD to deliver information in an accurate and timely manner. Students will draft in 2D and 3D, create plots, animations (walk-throughs), and program Auto Lisp routines.

TPA5015, Stage Machinery Design

This course focuses on the process of mechanical design for temporary and permanent stage machinery. Topics include design considerations, component selection, construction methods, and safety. Historical mechanical design, problems solving, and creative thinking is learned through lectures, discussions, and projects. The main goal of this course is to practice design. The students will be able to affectively design safe and functional mechanical scenery given specifications of a designer and director.

TPA5285, Technical Production and Management

This course focuses on the planning and management skills and tools necessary for Technical and Production Managers. Discussions will include the organizational structures in non-for-profit and limited partnership commercial venues; the roll of the manager in regards to responsibility, authority, leadership, interpersonal skills, planning, and facilities utilization; and close look at skills dealing with organizational principles, fiscal controls, cost and time estimating, scheduling, and purchasing for all phases of production. By the completion of this course students will be better suited for roles in Technical and Production Management. With the understanding of these positions and their purpose the students can interact more efficiently with these and other departments of a production.

TPA5286, Hydraulics and Pneumatics

The basis of this course is to continue the lessons learned in TPA5315 Physics of Stage Machinery applied to fluid power control. Discussion will cover concepts and components fluid system design. Topics include hydraulic power unit design, the selection and operation of electro-hydraulic proportional valves, counterbalance valves, filters, and pneumatic system design. Emphasis is placed on the practical aspects of component selection in assignments and projects. During the semester the students will design and assemble both a working hydraulic and a working pneumatic system. They will finish the course with the ability to design and determine all the necessary parts for any hydraulic or pneumatic plan needed in stage machinery.

TPA5930, Automation Control

Automation Control and the design of control systems will cover a broad range of subject including basic electronics, power models, switching, PLC programming, and safety standards. The course will use information obtained in Electricity and Electronics and Physics of Stage Machinery. The classes will be a mix of lectures, labs and projects. By the completion of the course, the students will be able to identify, troubleshoot, and create control systems for a number of theatrical automation systems. They will have basic PLC programming knowledge that will transferable to multiple PLC brands.

TPA5930, Stage Rigging

Stage rigging involves the safe and logical techniques to properly hang static or moving scenery, actors, props, lighting, etc. with the use of rope or wire rope. The class will learn the types of rigging used in live entertainment and the protocol for safety that each rigger must follow. The students will work with calculating loads and stresses, specialty hardware, and devices pertinent to rigging. We will also explore the considerations needed when installing permanent systems for consulting opportunities. Each student will be educated in all necessary safety practices for stage rigging. They will have a full understanding of equipment maintenance and care. The student will be able to rig large loads properly with consideration to the safety and needs of the production.

TPA5930, Show Control for Live Entertainment

Show Control is the study of interconnectivity of multiple devices to produce live effects in time with each other for real-time events. The course will cover the common device languages, physical connections, time codes, industry standards, and system design as well as current software designed to control multiple devices in numerous ways. By the completion of this course the students will be able to design and develop elaborate control systems for the using in live entertainment using multiple programming languages. These systems will also demand the use of varieties of feedback and control interfaces.

TPA5089, Audio/Visual Engineering

The focus of this course is to learn the necessary skills to engineer a video control system for use in a live entertainment setting. Discussions will include the basics of media design, formatting, and storage, playback devices and software, display devices such as projectors and LED walls, and the connections between each. By the completion of the course, the students will be able to assess and design playback systems and display devices with regard for live entertainment interactions. The students will be able to analyze and interpret data signals, the physics of projected light, and basic show control.

Directed Independent Study (DIS), Computer Applications for Technical Management

The course will begin by focusing on management software like Microsoft Excel, Access, Project, Outlook, etc. to create tools for inventory, scheduling, and budgeting. Then the student(s) will concentrate on the broadcast ability of these applications to other platforms to understand compatibility with Microsoft and Macintosh users. To achieve these goals homework and three major projects will be assigned throughout the semester. The student will discover and create new methods of using management software to more efficiently communicate others involved in a production.

DIS, Autodesk Inventor

The course is an in-depth look at the functions and capabilities of Autodesk Inventor. The three main topics that the class will focus on are:

- The relation between AutoCAD and Inventor.
- The usefulness for creating technical drawings and collaboration.
- The benefits during mechanical design.

The students will produce sketches, 3D models, working drawings, derived parts lists, and custom animations of mechanical designs and a stage production using Autodesk Inventor.

DIS, AutoCAD

This is an introductory course on learning the capabilities of AutoCAD. The student will cover the basics of 2D drafting tools as well as the complexities of 3D drafting. We will also learn to create comprehensive drawings for manufacturing of scenic pieces.

DIS, Production Management

The course prepares a student to handle the tasks of a Production Manager at a regional theatre. The student will gain an understanding of different theatre structures, budgeting, season selection, hiring, firing, and employee management.

DIS, Production Media for Live Performances

This course explores the use of media in live performance venues. Emphasis is placed in three areas: physical principles on stage, video development and editing, media playback and cueing.

Workshop Intensive – Microsoft Excel (2008, 2009)

A two day workshop beginning by giving the students basic training on setting up spreadsheets for use on entertainment based tasks. The second day looks at advanced programming using formula and personalized settings.

Guest Lecturer – THE2020 Intro for Theatre Majors (2008, 2009)

I lectured undergraduates on the roles of technical managers in the theatre. Topics also included concepts of technical design, automated scenery and projections in theatre.

Yale School of Drama

Dram 109a/b, Structural Design for the Stage, Teaching Assistant for Bronislaw Sammler, Professor (adjunct) of Technical Design and Production.

This class introduces pre-calculus and physical sciences for the application of statics to the design of safe scenic structures. Duties included grading assignments, tutoring students, and keeping the instructor updated on students' progress.

Dram 419b, Control Systems for Live Entertainment, Teaching Assistant for John Huntington, Lecturer in Technical Design and Production.

This class focuses on data communication and networking principles; details of entertainment specific protocols such as DMX 512, MIDI, MIDI Show Control, MIDI Machine Control, and SMPTE Time Code; and practical applications and principles of system design. Duties include: setting up and running labs, assisting students with specified software and applications. During the course I will have the opportunity to lecture on a subject.

Elon University

Guest lecturer – Technical Theatre

I lectured undergraduates on the physics of sound and the concepts of sound design. Provided hands on instruction in setting up a house sound system.

DeSales University

Guest lecturer – Summer Theater Institute

I performed 2 lectures on production management and technical tricks for the theatre. The students were in their senior year of high school attending a special summer course at the university.

Clinical Practice

BlackBoard 9.1

Point Park University - Theatre instructors were given an introductory walk through of the new on-line course software. Focus was given on how the instructors on the production side could use this effectively for their students in terms of communication and grading.

Rigging & Lifting

Instruction was given to all first year graduates in the FSU School of Theatre in the safety and procedures of working in an environment where heavy rigging and lifting occurs.

New Course Development – FSU School of Theatre

TPA5xxx, Audio/Visual Engineering

This course will cover concepts and components of video presentation in live performances. Emphasis is placed on the practical aspects of component selection, placement and use as they relate to the sound, lighting and scenic design and to the performance space.

DIS, Production Media for Live Performances

This course explores the use of media in live performance venues. Emphasis will be placed in 3 areas: physical principles on stage, video development and editing, media playback and cueing. By the completion of the course, the students will be able to assess

and design complete media systems suitable to various spaces and performances. The students will also be able to develop and manipulate various forms of video for use on the stage.

Professional Employment

Escape Room PGH

Electro-Mechanical Designer

Pittsburgh, PA

2015-2017

Description

Escape Room Pittsburgh is the city's first interactive, immersive puzzle game. Filled with riddles, gadgets, and mind tricks, the mysteries behind the Escape Room doors challenges teams to 60 minutes of isolation where only problem solving, creativity, and resourcefulness will lead to an escape. The three rooms (Tomb Explorer, Carnegie's Millions, and Subway Escape) are Generation 2 design with no locks or keys and relies on sensors and electronics to create the games and effects.

Responsibilities

- Design the electrical control systems and sensors for the each room.
 - This includes Programmable Logic Controls, Arduino, and a multitude of programming languages.
- Provide seamless interactive experience for the players and full control for the staff.

Pittsburgh Irish and Classical Theatre (PICT)

Technical Director

Pittsburgh, PA

2012-2013

Description

PICT is a regional theatre company producing and presenting classics and the "modern" classics of Irish and world theatre. The company produces 6 works each year with some years based around a particular playwright. They use a rented warehouse for shop space and rent 2 theaters from the University of Pittsburgh for their performances. This requires unique trucking and load-in challenges.

Responsibilities

- Searching and hiring staff, apprentice, and intern members.
- Reviewing and balancing the production budgets.
- Overseeing a shop staff of 4 carpenters and occasional over hire.
- Develop new shop space and populate with \$4000 of new tools.

Pittsburgh Playhouse

Pittsburgh, PA

Description

The Playhouse supports 4 different companies and produces a total of 18-20 shows a season. The facilities are fully staffed and aided by students from Point Park University during their course of study.

Projections Designer

2016

Responsibilities

- Develop the content for projector effects that are cast upon the audience for *The Flick*.
- Complete a full installation of a Projection equipment and cooling needs.

Automation Specialist/Engineer

2010-2011

Responsibilities

- Develop the automation needs for the elevator in the production of *Thoroughly Modern Millie*.
- Complete a full installation of a vent-less spray booth in the Costume Shop's crafts room.

Description

The conservatory is a dedicated resource by the state of Florida for graduate actors to develop their craft. The Asolo Conservatory is run in conjunction with Asolo Repertory Theatre. *Machinal*, guest directed by Dmitry Troyanovsky, was stage in a more contemporary manner requiring projection to aid in the imagery of the characters inner struggles. The scenic elements consisted of 11 chairs and a 16'x11' plain moving wall. This wall was the only projection surface and played in multiple positions and angles.

Responsibilities

- Setup and ran a full day of video shoots on green screen of the actors three weeks before opening.
- Created all content from scratch including visual effects of time remapping, color correction, and audio syncing.
- Engineered a two projector, three computer rig for playback.
- Conceptually designed and cued the show using Dataton WATCHOUT.

Spiderman Broadway LLC (*Spiderman-Turn Off the Dark*)

NYC, NY

Tony Award Nominated - Scenic Design

Database Designer

2009

Description

Spiderman - Turn Off the Dark is a Broadway production planning to open in 2010. With music and lyrics by Bono & The Edge and directed by Julie Taymor, this production is expected to be the most expensive Broadway production in history. The show has 128+ moving and automated units that move in more than 80 scene shifts. The need for tracking software became necessary for both the Scenic Design team and the Production Management team.

Responsibilities

- Build individual Databases that track automated scenery for two different departments.
- Database must output information in a style comparable to previously used paperwork.
- Database must be able to automatically update all pertinent scenes when changes occur.
- Create optional reports that would aid in the process of technical rehearsals.

Pennsylvania Shakespeare Festival (PSF)

Center Valley, PA

Production Manger

2007

Description

PSF is summer stock theater company that produces six shows in the course of ten weeks on the campus of DeSales University. The shows occupy three spaces. Two of the main stage productions play in repertory with a children's show that runs the length of the summer. PSF employs 150+ staff per season.

Responsibilities

- Searching and hiring staff members for all production areas.
- Reviewing and balancing the production budgets.
- Supervising all production areas (35+ staff).
- Ensured that the artistic vision was held to within the means of the budget and time.
- Planned and managed all production meetings
- Regularly present budgetary and managerial reports to the general manager and the area heads
- Enforced fire and safety regulations.
- Acted as Projections Engineer for Amadeus.

Notable productions and elements

- *Amadeus*, 2007. Star cast members, automation and projections on a very ornate set provided many challenges
- *Mysteries of Erma Vep*, 2007. Many tricks for this fast paced comedy provided much work for Props, Costumes, Scenery, Lights, and Sound.

Technical Director

2004, 2005

Description

PSF's scenic shop facilities provided the proper equipment but tight quarters. The challenge was often not that we had too small of a staff but enough space to build. Scheduling for build, load-ins and strike were crucial due to the noise of the shops and the close proximity of the theaters during performances.

Responsibilities

- Review, budget, and draw technical draftings for scenic designs.
- Oversee an Assistant Technical Director, two Master Carpenters, three staff carpenters, and three carpentry interns in the construction, installation and striking of the scenery.
- Plan and manage the daily changeovers of a children's show to a main stage production with a crew of ten technical interns.
- Build and install an outdoor performance space and concessions area.
- Regularly present budgetary and managerial reports to the general manager and production manager.
- Enforce fire and safety regulations both in the design and construction of the scenery.
- Review resumes and hire shop staff.

Notable productions and elements

- *Man on LaMancha*, 2004. A tight change over period with lack of storage for large scenery. Also required a large steel counter-raked staircase that flew.
- *Henry V*, 2005. Demanded multiple traps, one with a sunroof and an electric winch driven elevator.
- *Imaginary Invalid*, 2005. A co-production with Orlando Shakespeare Festival. The show was built at PSF to accommodate both spaces, repertory, and easy travel.

New Haven Arts & Ideas Festival

New Haven, CT

Video Supervisor

2006

Description

The Art's & Ideas Festival puts on a wide arrange of works in multiple venues and on many stages on "the green" in downtown New Haven. Many of the shows traveled with or required rental and set-up of visual media. The shows ranged from large outdoor concerts with live video feeds to projecting prerecorded media for small experimental dance, orchestrated pieces, and performances. A special Shakespeare production was performed with live and recorded holographic actors. The achievement of the holograms was through creative video and projection.

Responsibilities

- Oversee all visual media in the indoor venues and be on call for other venues.
- Obtain and set-up projectors and visual media.
- Trouble shoot equipment.
- Run video for shows.
- Assist touring groups with their equipment and collaborate with their shows video engineer.
- Collaborate with lighting and sound.

Maine State Music Theater (MSMT)

Brunswick, ME

Assistant Technical Director

2001-2003

Description

MSMT produces four to five musicals each summer in the theater facility of Bowdoin College. All shops, offices, and rehearsal spaces are off site. During 2003 MSMT moved its shops into a new facility.

Responsibilities

- Manage Master Carpenter, 2 staff carpenters, and 3 carpentry apprentices.
- Produce shop drawings for construction.
- Manage truck pack and drive 24' box truck.
- Responsible for purchases.
- Aid in construction.
- Design and built new/large tool room.
- Adjusting construction processes to a new shop space.

Notable productions and elements

- *The Scarlet Pimpernel*, 2001. MSMT rented the set that was built for a larger space. Some units had to be rebuilt due to weight, and others were nondestructively altered to fit. Due to weight, the guillotine unit was assembled using rented hand operated material lifts.
- *La Cage aux Folles*, 2003. Three large hand driven tracking units moved up and down stage. One of the tracking units revealed a telescoping staircase.
- All the productions were built at the shop and transferred using a 24' box truck that was then unloaded to a 20' flatbed truck. The bed of this truck had a scissor-lift bed that allowed the scenery to be unloaded onto the 12' high stage.

I.A.T.S.E. Local 635 Winston-Salem, NC (non-member) 1999-2001

- Spot operator at Joel Coliseum, Winston Salem, NC (operating a Strong Super Trooper Spot Light)
- Electrician and Deck Hand on load ins and outs of multiple concerts and tours (i.e. World Championship Wrestling, Reba McEntire, and Alabama)
- Multiple pipe and drape installations and strikes for conventions at M.C. Benton, Jr. Convention & Civic Center and Adams Mark Hotel

Central Piedmont Summer Theater Charlotte, NC Technical Director 2000

Description

Central Piedmont Summer Theater was in residence at Central Piedmont Community College while they produce five shows, four of which were musicals. The proscenium style theater had a wide stage with a 13' high ceiling. The stage had little wing space, but was connected to the scene shop on either side of the stage. This requires the shop to be used for scenery during shows.

Responsibilities

- Manage Master Carpenter, two staff carpenters and six technical interns ranging from twelve to twenty years of age.
- Provide instruction and mentor shop interns.
- Budget and technically design scenic elements for all productions with a small budget and stock scenery in mind.
- Coordinate projects with other departments and manage shop space.
- Maintain the schedule for a tight change over period.
- Review resumes and hire shop staff.

Notable productions and elements

- *Hello Dolly*, 2000. The design, by Bob Croghan, required a large ornate manpowered trolley to move across the stage.

- *Carousel*, 2000. The carousel unit was an octagonal tower that was driven on stage by two stagehands hidden inside. A hand winch extended eight pipe arms simultaneously to mimic a real carousel. The carousel horses were crafted by three departments (Scenery, Props, and Costumes) and mounted on castered boom bases to be pushed in time with the carousel.

Master Carpenter 1999

- Construct scenery for five productions including *Blood Brothers*, *Children of Eden* and *Guys and Dolls*.
- Supervise and instruct interns during the build and runs of shows.

Orlando-UCF Shakespeare Festival (OSF) Orlando, FL

Assistant Technical Director 1999

Description

Orlando Shakespeare Festival produced two main stage productions at the Walt Disney Amphitheater on Lake Eola. Scenery for the two shows rep on a large unit set that is constructed on the outdoor stage. The shops and office spaces are off site. OSF moved into a new building in 1999.

Responsibilities

- Construct technical theater office, tool room and prop storage.
- Load shop into a new space.
- Assist in technical decisions and construction for the main stage productions.
- Oversee transportation and installation of scenery and unit set.

Free Lance Work:

WalkerDance's - *The Nutcracker* Elon, NC

Technical Director 1999-2002

Description

WalkerDance rents the proscenium space at Elon University to perform *The Nutcracker*. The company consists of approximately seventy children and adults. Volunteers deliver the companies stock scenery, and assist in running the show.

Responsibilities

- Act as a liaison between WalkerDance and Elon University.
- Run a pre-load-in with university students.
- Oversee IATSE Local 574 load-in crews.
- Repair and maintain touring scenery
- Act as Deck Chief with volunteer crew.

SE Systems Greensboro, NC

Sound Engineer 2001-2002

Description

SE Systems is a professional event production company which delivers sound, lighting, staging, and professional staff to all kinds of productions.

- Install state of the art sound system for a furniture showroom in High Point, NC
- Replace and upgrade sound system for Jack Astor's Bar & Grill in Greensboro, NC

Olympic Heights High School Boca Raton, FL

Scenic Designer 1996-1997

Description

The Olympic Heights drama department performs a main stage play and musical each year in their large proscenium theater. The students are actively involved in building and running the shows.

Responsibilities

- *Bye-Bye Birdie*, 1996. Multiple scenes with rented drops.
- *Rumors*, 1997. Two story unit set.
- *Guys and Dolls*, 1997. Multiple scenes with mobile scenery.
- *Annie Get your Gun*, 1998. Multiple scenes with mobile scenery, including a three story hotel unit.

Professor Saturn's Atomic Theater

Orlando, FL

Stage Manager

1996

Description

Professor Saturn's was a performing company dedicated to doing science fiction plays. They took their shows to multiple venues across central Florida.

- Episode 26-Flash Gordon, A Parody
 - Fringe Festival, Orlando 1996
 - Tampa Performing Arts Center 1997

Professional Memberships

USITT- United States Institute for Theatre Technology	2006-Present
SETC- South Eastern Theater Conference	1999-2003, 2007, 2011-Present
Ohio Valley Section USITT	2010-2012
LDI- Lighting Dimensions International	2007
APO- Alpha Psi Omega (National Theater Honor Society)	2000-2003

Publications

John Huntington. (2017). Title: *Networking and Control Systems for Live Entertainment*. Second Edition Zircon Design Press. Illustrated by Aaron Bollinger

Description

I updated previous illustrations and replaced all photo content with comprehensible technical illustrations to aid in the descriptions of networking and control system design. The author requested that I create all of these graphics to give the book a brand new style and a timely format.

John Huntington. (2012). Title: *Networking and Control Systems for Live Entertainment*. Zircon Design Press. Illustrated by Aaron Bollinger

Description

I developed and updated 150+ technical illustrations to aid in the descriptions of networking and control system design. The author relied on my knowledge for the creative development and accuracy of the graphics.

Aaron Bollinger. (2013) Title: *Fabric Swag Scene Changes Made Easy* published in *Technical Design Solutions for Theatre. Volume 3*. ed. Bronislaw J. Sammler, Don Harvey. Focal Press.

John Huntington. (2007). Title: *Show Control for Live Entertainment*, Third Edition. Focal Press, Oxford. Illustrated by Aaron Bollinger

Description

I developed 110 technical illustrations to aid in the descriptions of show control techniques. The author relied on my knowledge for the creative development and accuracy of the graphics.

Aaron Bollinger. (2005). Title: *Fabric Swag Scene Changes Made Easy* Technical Brief. Yale School of Drama, New Haven

Presentations

Tracking Your Resources:

Methods of Labor and Money Management for Technical Directors 2014

United States Institute for Theatre Technology (USITT) - Technical Direction
Commission (National)

Invited by Ben Stark, Technical Director of Kansas State University. This session will focus on the various computer applications (Excel, Access, and others) Technical Directors use to plan and track production labor and expenses. Please bring your laptops to follow along with the examples.

Automation Safety: Beyond the E-Stop 2013

United States Institute for Theatre Technology (USITT) - Engineering Commission
(National)

Invited by Chris Peterson of Tait Towers. Emergency Stops are important, but they are not the only component in an automation safety system. Modern Systems utilize multiple devices to increase safety prior to and during moves, such as safety edges, light curtains, and electro-mechanical interlocks. This session will present and overview of these and other devices used to make automation systems safer in everyday use.

Automation 101 - How it Works, How it Fails. 2012

United States Institute for Theatre Technology (USITT) - Engineering Commission
(National)

Invited by Alan Hendrickson to speak at this introductory level session, the forth in a yearly sequence covering typical machine components. Scenery automation systems must be designed to move scenery as intended of course, but they also must be designed to fail safe—literally maintain safety despite some failure. This session will present basic illustrative examples of this concept for three different parts of the overall system: the control system, the machinery running the effect, and the load being moved.

Automation 101 - Terminology. 2010

United States Institute for Theatre Technology (USITT) - Engineering Commission
(National)

Invited by Alan Hendrickson to speak at this introductory level session, the third in a yearly sequence covering typical machine components. This session described the key components of a typical automation system, and define many of the terms involved in their setup and use. This is essential basic information for those designing and operating these systems, as well as those considering incorporating automation in their productions for the first time.

Digital Projections in Production 101. 2010

United States Institute for Theatre Technology (USITT) - Education Commission
(National)

Invited by Kenneth Verdugo to speak on the following: A general exploration of guidelines to follow and pitfalls to avoid when doing digital imagery in a live production. Session will cover basics of design, software, and hardware, for low budget and high end applications. The panel will provide anecdotal commentary demonstrating successful and not so successful experiences.

Automation 101 - Brakes. 2009

United States Institute for Theatre Technology (USITT) - Engineering Commission
(National)

Invited by Alan Hendrickson to speak at this introductory level session, the second in a yearly sequence covering typical machine components, will define and describe the various sorts of brakes typically used on stage machinery. Topics such as brake types, ratings, sizing

a brake to an application, engage and release response times, and mounting will be covered within the context of using a brake in a typical winch.

Exhibit of illustrations for the book Show Control for Live Entertainment. 2008
Richard G. Fallon Theatre lobby. FSU School of Theatre. Tallahassee, Fl.

Contracts and Grants Funded

Aaron Bollinger. Advanced Digital Media Playback System for Live Entertainment.
Funded by FSU Research Foundation - Equipment and Infrastructure Enhancement Grant.
(7/08 - 6/09). Total award (\$31,037.00).

Aaron Bollinger. Projections and Other Digital Media in Live Entertainment.
Funded by Council on Research & Creativity - First Year Assistant Professor Grant. (5/08 -
8/08). Total award (\$16,000.00).

Aaron Bollinger.(11/09) Production Planning Application for Dynamic Scenery.
Submitted to Council on Research & Creativity - Committee of Faculty Research Support
Grant (\$14,000.00)

Contracts and Grants Denied

Aaron Bollinger. (12/08). Show Control for Live Entertainment: Developing Highly
Effective Performer Actuated Control of Productions Devices.
Submitted to Council on Research & Creativity - Committee of Faculty Research Support
Grant. (\$14,000)

Robert Coleman, Aaron Bollinger. (1/07). Computer Aided Design and Production
Environment in an Electro-mechanical Lab.
Submitted to Center for Teaching and Learning - Advisory Council for Innovative
Instruction. (14,917.00)

Point Park University Service and Committee Work

University

Committee Member, Curriculum Committee 2012-Present

Conservatory of Performing Arts - Theatre

Committee Chairperson, Departmental Curriculum Committee 2013-Present

Committee Member, Departmental Curriculum Committee 2011-Present

Committee Member, Safety Advisor (Pittsburgh Playhouse) 2011-Present

Committee Member, Handbook Committee 2010-2011

FSU University Service and Committee Work

University

Grant Reviewer, Council on Research & Creativity. 2008

- Testing Macroevolutionary Methods of Analysis Using Bivalve Mollusks by Scott Stepan.
- Industrial Hygiene for the Stage: Establishing Guidelines and Strategies for a Safe Workplace by Robert H. Coleman.

The School of Theatre

Committee Chairperson, Design/Tech Expo Committee 2007-2009

Committee Member, Production Advisory Committee 2006-2010

Committee Member, Design, Production, and Management Area 2006-2010

Committee Member, Search Committee (Lighting Designer) 2006-2007

Committee Member, Search Committee (Assistant Shop Manager) 2006

Committee Member, Search Committee (Assistant Shop Manager) 2008

Technical Production Program

Committee Member, MFA Thesis Committee 2006-2010
15 Graduate Students

Directing Program

Committee Member, MFA Thesis Committee 2008-2010
6 Graduate Students

AWARDS

Edward C. Cole Memorial Award in Technical Design and Production
Yale University, 2006.

Specialist Training

CReATE (Compliance and Research Administration and Training) 2007

Description

A three day course at FSU to become familiar with various federal rules and policies governing the administration of sponsored research.

LiveDesign Projections Master Class 2007

Description

A two day intensive on projections equipment and use in the live entertainment industry. The course was held at LDI (Lighting Design International) convention and sponsored by LiveDesign magazine.

Automation Studio Training Session 2007

Description

A two day training session on software which creates a virtual environment to work with electricity, hydraulics, pneumatics, and PLCs (programmable logic controllers, used in automation control).

Services

Consultation

The Goodman Theater - *A Christmas Carol*
Projections and Video Content. 2008

Alan Hendrickson - Hudson Scenic Studios - *The Lion King*
Pride Rock - CNC Routed Facing using Autodesk Inventor. 2006

Point Park University

Faculty Advisor for the Technical Theatre Student Club 2011-Present

This group is an assembly of Technical Production, Design, and Stage Management students in support of the Pittsburgh Playhouse. The groups goals are to raise money for student improvements in the playhouse and raise money for local charities.

- Established a formal committee of officers.
- Certified our standing with student Government.

Elon University

Faculty Advisor for Alpha Psi Omega, Sigma Nu chapter 2000-2003

The national honor society strives to stimulate interest in theater activities, to develop talents in all aspects of theater, and to foster the cultural values believed to be developed through theater.

- Reestablished a formal committee of officers.
- Certified our chapter through the national office.

- Developed multiple fundraising events:
 - “The Game”, a scavenger hunt that heightened the knowledge of students to theater as well as raised over \$500 for a local charity.
 - Krispy Kreme Drive.
 - The McCrary Theater Concessions counter.

References

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