

# BRADLEY WALDEN

## 4th Year Electronic & Computer Engineering Student

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📍 Dublin / Galway, Ireland

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I'm a 4th-year Electronic and Computer Engineering student at the University of Galway, with a lifelong passion for theatre. Through my studies, I've gained a solid foundation in digital systems, complex signal processing, programming, circuit design, control systems and more, along with strong analytical and problem-solving skills. With over a decade of hands-on experience in theatre tech and event production, through school, university, and volunteer work across South Africa, Switzerland, Ireland, and the USA, I bring a unique blend of creative and technical expertise. I'm passionate about using engineering principles to improve reliability, efficiency, and innovation in technical theatre systems. My experience spans a wide range of disciplines, including audio, video, lighting, rigging, wigs, costumes, carpentry, and more. Colleagues often value my ability to learn quickly, adapt under pressure, and contribute with precision, attention to detail, and dedication. I'm now committed to building a career that combines my engineering background with my lifelong passion for theatre.

## RELEVANT WORK EXPERIENCE

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### Audio/Video Technician

**Elliot Hall of Music, Purdue**

⌚ Aug 2024 – May 2025

📍 West Lafayette, Indiana, USA

- Broad live event experience, incl. audio engineer (30+ events), video engineer (5), camera operator (12 incl. sports, ceremonies, and concerts), lighting technician (8), and general stagehand for many more.
- Worked as local crew of 4 US National Tour stops, across Sound, Lighting, Wigs & Carpentry

### Audio/Video Technician

**Uni. of Galway Societies Office**

⌚ Oct 2023 – May 2024, Jul 2025 –

📍 Galway, Ireland

- Audio and lighting at a variety of university events, incl. club nights, conventions and society events
- Problem solving and quick thinking skills, often working with limited time, resources and information

### Head of Tech & Musical Director/Sound Designer

**Uni. of Galway Drama Society**

⌚ Sep – Nov 2023

📍 Galway, Ireland

- Exit The King (Oct 2023) & The Lightning Thief (Nov 2023)
- Led the technical team, overseeing all aspects of sound, lighting and video for both productions
- Acting the liaison between the technical teams and the creative team

### Section Manager - Immersive Christmas Experience

**Elf Town Galway**

⌚ Oct – Dec 2023, Aug 2025 –

📍 Galway, Ireland

- Led one section, coordinating technical elements, performers, and audience flow for a seamless visitor experience
- Working on several complicated lighting and scenery elements, across a vast immersive set
- Covered costuming and makeup roles as needed, highlighting adaptability and dedication

### P2 Test Development Engineer Intern

**Valeo**

⌚ May 2023 – Sep 2023

📍 Tuam, Ireland

- Developing a version control and auto-update system for production line testing
- Using a combination of NI TestStand, Python, Tortoise SVN & batch scripts
- Seamless integration into the existing production line testing system

### IT Support Specialist

**International School Basel**

⌚ Dec 2021 – Aug 2022

📍 Basel, Switzerland

- IT Helpdesk work, troubleshooting a wide variety of issues, across Windows, Mac & iOS
- Part of the tech crew for 4 school musicals, working as Dep. Head of Sound, Sound Designer, Patch Technician etc.
- Built the school's video streaming system, using up to 4 cameras to livestream concerts and events

# THEATRE TECH SKILLS

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## Audio

- Sound mixing (FOH & Monitor), system setup, patching & troubleshooting
- Experience with Allen & Heath iLive & MIDAS M32R, QLab, SCS, OSC, Dante, Wireless Workbench

## Video

- Live video directing & switching
- Building and operating LED walls
- Camera operation (long-glass, handheld & PTZ) for sports matches, conferences and ceremonies

## Lighting

- Rigging, setup & patching of lights
- Lighting design & programming (ETC Ion)

## Other

- Wig styling and application, incl. working as a local wig dresser for a national tour
- Sewing; building and altering costumes
- Basic carpentry skills; building and painting sets
- Some hands-on experience with rigging, incl. chain motors and fly systems

# ENGINEERING SKILLS

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## Programming & Problem Solving

- Proficient in Python, C, C++, Java, experience in object-oriented design & data structures
- Strong technical problem-solving and debugging skills across hardware and software systems
- Familiar with Git version control, Linux environments, shell scripting & command line tools

## Hardware Electronics

- Circuit design, analysis, and simulation (analog & digital), PCB layout and soldering
- Microcontrollers and embedded systems
- Power electronics knowledge, power distribution and system safety fundamentals

## Signal & Data Processing

- Strong foundation in signals and systems, time/ frequency domain analysis and Fourier transforms
- Signal processing concepts, sampling, filtering
- Python for data analysis, simulation, and algorithm development

## Wireless, Networking & Communication

- Practical knowledge of networking protocols, IP addressing, and network security
- Understanding of RF theory and wave propagation through electromagnetics

# STRENGTHS

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- Fast learner, pick up new skills quickly, adaptable
- Attention to detail, ensuring high-quality work in all aspects of production
- Problem solver, thinking on my feet and troubleshooting under stress
- Organisation, communication & collaboration

# CREATIVE & PERFORMANCE EXPERIENCE

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- *South Pacific* (2016): StewPot & Ensemble, The International School Basel
- *My Fair Lady* (2017): Prof. Henry Higgins, The International School Basel
- *Guys And Dolls* (2018): Arvide Abernathy, The International School Basel
- *Calamity Jane* (2019): Doc. Pierce, The International School Basel
- 16 years playing the piano; ABRSM Grade 6
- Many years singing; ABRSM Grade 4, as well as many choirs and ensembles
- Proficient in arranging and transcribing music (Musescore, Sibelius)

# EDUCATION

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## IB Diploma (May 2020)

### International School Basel

38/45 points, with Higher Level Mathematics, Physics, Chemistry.

## B.Eng + M.Eng Electronic & Computer Engineering (Exp. 2027)

### University of Galway

Achieved First Class Honours in all three years of study, with an average above 80%. I have a strong interest in embedded systems and software development, and was selected for a year abroad at Purdue University (Indiana, USA) based on academic performance.