John McKernan

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PROFILE

Savvy software developer with extensive knowledge and a talent for quickly mastering new technology. Strong background in audio technology, production, and software.

EDUCATION

Purdue University (Expected May 2021) – West Lafayette, IN

- B.S. in Computer Science, Minor in Forensic Science – 3.69 GPA
- Purdue Presidential Scholarship – 2017
- Relevant Coursework: Systems Programming, Software Engineering, Data Structures and Algorithms, Computer Architecture, C Programming, Discrete Mathematics, Multivariate Calculus
- Teaching Assistant for Programming with Multimedia Objects in Python – Spring 2018

SKILLS

C++, C# .NET, PHP, C, JavaScript, Git, SVN, Bash, PowerShell, Python, SQL, Visual Basic, HTML, CSS

EXPERIENCE

Software Intern, Automated Test Engineering, Shure Inc., Niles, IL – May to August 2018

- Worked with engineers to maintain software and systems that validate every manufactured unit
- Maintained, developed, and supported mission-critical systems and tools for 10 global plants

Audio Technician, Shows Department - Six Flags Great America, Gurnee, IL – April to August 2017

- Repaired, troubleshooted, and operated large-scale audio-visual systems
- Responsible for the setup and mixing of 6 daily live performances for more than 1,000 people

Gate Staff, Ravinia Music Festival, Highland Park, IL – May 2015 to September 2016

- Developed customer service skills greeting and directing guests for concert events
- Yearly attendance of nearly 600,000 guests for over 130 concerts

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PROJECTS

SplitSound – Early Development – C++, CMake, QtQuick QML, Java, Swift

- Pioneered audio sharing software for turning any smartphone into a speaker or wireless headphone receiver; permits sharing of audio from any networked computer to other devices
- Worked with a team of friends to design cross-platform desktop and mobile applications

VRoadtrip – Hello World Hackathon 2017 Best Web Dev Application – JavaScript, HTML, CSS

- Led a team of three to develop a service that uses any Google Maps driving route to create a time-lapse of Street View images along its path—a virtual road trip
- Used the Google Maps and Google Street View APIs to create the route, show location progress, and request each frame

CreateSED – Visual Basic

- Collaborated with a research team to design a macro for creating Spectral Energy Distribution plots on the Caltech\NITARP project "An Infrared Search for Young Stellar Objects in IC 1396"
- Automated manipulation of raw data sets, creation of plots, and distinction of trends

Remote Serial Control for Arduino – Python

- Created a versatile tool for networked control of props and displays in stage applications
- Used a multi-threaded socket server to manage simultaneous connections from multiple clients and nanpy to send live serial commands from the server to an Arduino