# John McKernan

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### PROFILE

Savvy software developer with a passion for learning and a talent for quickly mastering new technology.

#### EDUCATION

Purdue University (May 2021) – West Lafayette, IN – GPA: 3.86

- B.S. in Computer Science, Minors in Computer Information Technology & Forensic Science
- Purdue Presidential Scholarship 2017 to 2021
- Relevant Coursework: Operating Systems, Compilers, Computer Networks, Systems Development, Software Engineering, Data Structures and Algorithms, Computer Architecture, Cyber Forensics

#### LEADERSHIP & AWARDS

- Mentor at Purdue's Hello World Hackathon Fall 2019, Fall 2020
- Teaching Assistant for Programming with Multimedia Objects in Python Spring 2018
- Partner at Symboxtra Software Spring 2017 to present partnership responsible for creating, supporting, and contributing to open-source projects
- Best Web Development Application vroadtrip.tk Hello World Hackathon Fall 2017

#### **SKILLS & TECHNOLOGIES**

Python, C++, C, TypeScript, React, SQL, Git, SVN, Bash, PowerShell, Docker, Ansible, CI/CD, Protobuf

#### EXPERIENCE

AT&T, Software Engineering Intern, Chief Security Office Remote June 2020 – August 2020
Joined the Cloud Security Architecture team to assist with and help secure the transition of more than 4,000 applications from on-premise data centers to the public cloud

- Collected and implemented requirements for new automation and architecture (Java/Spring)
- Helped transform cloud firewall requests (5-to-10-day turnaround) into an automated process
- Took a leadership role in two team projects: a web app (Angular) and a data modeling project

## OceanComm, Engineering Intern, Startup / R&D

Contributed to research, development, and commercialization of underwater acoustic modems

Chicago, IL

May 2019 - May 2020

May 2018 – August 2018

- Designed video processing and compression for low-bandwidth streaming via acoustic link
- Redesigned a data analysis tool suite, extending its capabilities and visualizations (PyQt, Postgres)
- Containerized applications and services using Docker for reliable and portable use
- Abstracted and integrated hardware sensors and peripherals (GPS, LoRa, IMU, Camera)

#### Shure, Software Intern, Automated Test Engineering Niles, IL

- Worked with a team of hardware engineers to support manufacturing/product validation systems
- Developed and maintained mission-critical tools, databases, and websites for 10 global plants
- Learned new languages and technologies (C#, SVN, Visual Basic) on-the-job doing full-stack work

#### PROJECTS

SplitSound – C++, V8, CMake, JavaScript, Electron, Flutter, Google Compute Engine

- Developed audio sharing software for turning any smartphone into a wireless speaker or headphone receiver; permits sharing of audio from any networked computer to other devices
- Built cross-platform desktop and mobile applications with a team of friends
- Created a V8-based C++ addon (HulaLoop) to stream system audio into Electron's WebAudio graph