

JOHN M. BORN

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EDUCATION

University of Illinois at Urbana-Champaign

August 2016 - December 2019

B.S. Computer Engineering

GPA: 3.71/4.00

- ML Coursework – Machine Learning, Deep Learning in Hardware, Computational Linguistics
- Other Coursework – Multimedia Signal Processing, Image and Video Processing, Virtual Reality
- Chancellor's Scholar – 2% of students per class, fulfillment of honors contract
- Provost Scholarship – 30 students per class, full tuition for 4 years

EMPLOYMENT

University of Illinois at Urbana-Champaign

Champaign, IL

Lead ELA (Engineering Learning Assistant)

August 2018 - Present

- Lead departmental meetings to adjust and create lesson plans for Pre-Engineering students
- Teach ENG 100 to guide students in navigating higher education, choosing majors, and finding career paths

Kellogg's

Oak Brook, IL

IT Intern – Lead Developer

May 2019 - August 2019

- Used React Native to create a mobile app providing resources to disadvantaged Chicago communities
- Led 8 interns by providing resources, debugging assistance, and coordinating a team work flow

IT Intern – RPA (Robotics Process Automation)

May 2019 - August 2019

- Utilized UiPath to implement RPA solutions to automate sales data pipelines
- Attended B2B API meetings to learn about enterprise software solutions

USGS (United States Geological Survey)

Champaign, IL

Programming Assistant

July 2018 - May 2019

- Developed FluEgg (a fluvial asian carp egg simulator) to quantify negative impacts of invasive species
- Ensured FluEgg API is maintainable, well-documented, and object-oriented
- Created FRMC GUI and backend (calculates the toxicity of fire retardants for US Forest Service)

ACTIVITIES

Personal Projects

EEG Headset Controller

- Parsing EEG headset brainwave frequency spectra to control video games in place of traditional controllers

Poker Tracker App

- Creating Android application to track poker games in place of physical poker chips

Swarm Robotics Research

Champaign, IL

Research Assistant

February 2017 - January 2019

- Created 3D CAD hardware models for individual robots to be used in a swarm
- Explored theoretical models of robotic systems (including consensus, linkage, sensors, etc.)

iRobotics Executive Board

Champaign, IL

Treasurer

June 2017 - June 2018

- Approved robotic part purchases totaling approximately \$20,000 annually
- Tracked team sponsorships and ensured funds are allocated correctly

Web Master

February 2017 - June 2017

- Updated and maintained information on the organization's website
- Utilized basic CSS and HTML to modify website functionality

SKILLS

- Proficient in Python, C++, C, JavaScript; Experience in HTML, C#, Java, MATLAB, x86 Assembly
- PyTorch, React Native, WebGL, Unity, PyQt, UiPath, Git, Github, GitLab, Unix CLI, Jupyter Notebook
- Scaled Agile Framework certified (SAFe), Spanish (conversational), multimeter, oscilloscope