# James Timotiwu

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EDUCATION

#### University of Illinois at Urbana Champaign, Urbana, IL

Graduating 2020

B.S. in Electrical Engineering with Minor in Computer Science

Recieved 2017 Illinois Engineering Achievement Scholarship as Transfer

Coursework in Discrete Structures, Data Structures and Algorithms, Systems Programming, Applied Linear Algebra, Analog Signal Processing

## University College London, London, UK

Spring 2018

Affiliate Engineering Study Abroad Exchange

Coursework in Statistics, Control Systems, Advanced Digital Logic, Digital Signal Processing

# Case Western Reserve University, Cleveland, OH

2015-2017

Recieved 2016 OSGC Ohio Space Grant Scholarship

EXPERIENCE

# Microsoft, Redmond, WA

Summer 2018

Software Engineering Intern (C++)

Developed low latency network data capture solution that securely allows third party services route network traffic to an endpoint without exposure to public internet

Refactored the cache of a critical backend component deployed to all Azure cloud compute clusters globally, implementing persistence and overhauling into a common library Implemented REST API interface for performant flow based network traffic event listener

#### NASA Glenn Research Center, Cleveland, OH

Summer 2017

Research Engineer Intern (Python, JupyterNotebook, Numpy/Pandas, C++)

Automated and parallelized data processing on Python and C++, evaluating data with numpy and creating meaningful research data representation on jupyter/matplotlib

Developed interface to analyze and compare data from arbitrarily many data sources, and integrated sliced video data with numerical data collected over the same time period.

#### NASA Glenn Research Center, Cleveland, OH

Summer 2016

Software Development Intern (JavaScript, Python, Numpy/Pandas)

Responsible for minimum viable product of automated workflows applications to improve project management work efficiency, analyzing and addressing present workflow faults

Designed and implemented an advanced workflow application on JavaScript for governance board clients, completely replacing current paperwork procedures

PROJECTS

#### dos Medicine Dispenser (Java, Arduino(C))

https://devpost.com/software/dos-medicine-dispenser-q6ycfj

Automated and secure storage solution to manage and distribute medication.

## **Pi Bot** (Python, Arduino(C))

Robotics project that utilizes obstacle avoidance techniques and intelligent navigation through populated surroundings controlled by Arduino and RaspberryPi setup

# Unique Pair Scheduler (Java)

Sorts a large list of people into a schedule of smaller two person pairs without repetition

#### Reversi (Java)

Fun implementation of the board game Reversi with resizable board

SKILLS

C/C++, Java, Python

Familiar with JavaScript, VHDL, Verilog, HTML5, CSS3, Bash, Git

Other expertise in vim, pandas/numpy, Software Defined Networking, Jupyter, Arduino

Additional Experience

# CWRU Undergraduate Diversity Collaborative, Treasurer

2016-2017

Managed and properly allocated funds to all diversity and cultural organizations on campus

### NASA Glenn Research Center, Educational Outreach

0015 2017

Assisted and facilitated five educational outreach events, demoing NASAs virtual and augmented reality technology to visitors