Joshua O'Callaghan

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PROFESSIONAL EXPERIENCE

Intel - Cloud Software Engineer

May 2021 – Present

- Media Processing and Media Benchmarking Expert
 - Interpreting FFmpeg results and performing media analysis across various cloud/physical machines
 - Creating and maintaining database for performance numbers across Intel product line
 - Managing team cloud accounts across AWS, GCP, and Azure and physical benchmarking lab machines
 - Automated benchmarking and data collections to improve efficiency by 500%
- Producing visualizations to share across large audiences
 - Designed web app to create visualizations quickly and effectively using Python & Plotly
- Leading a team of engineers and business management to deliver competitive analysis benchmarking software
 - Coordinating work and product definition while implementing feature changes in the code base
- Managing complex time schedules through working on an international team

Intel - Software Engineering Intern

Sept 2019 - May 2021

- Visualized data for error analysis with various visualization tools like Plotly, PowerBI, and Tableau
- Assembled various Python and bash scripts for automation

American Express – Software Engineering Intern

June 2019 - August 2019

- Redesigned infrastructure for Platform Engineering team
- Administered 4 server nodes running unique applications & tools on a HA Kubernetes cluster

EDUCATION

M.C.S. Computer Science (Big Data)

Dec 2020

Arizona State University, Ira Fulton School of Engineering, Tempe, AZ

B.S. Computer Science (Cyber Security)

Dec 2019

Arizona State University, Ira Fulton School of Engineering, Tempe, AZ

Relevant Coursework:

Data Structures and Algorithms, Algorithm Design & Analysis, Data Mining, Distributed Databases, DBMS Implementation

SKILLS

Coding Languages: Python, Java, C++, C, C#, Bash,

HTML/CSS

Big Data: Kubernetes, Docker, Elasticsearch, Hadoop/Spark **Soft Skills:** Leader, Communicative, Problem Solver, Innovator

Software: Power BI, Tableau, Microsoft Office **Operating Systems:** Windows, Ubuntu/CentOs

Cloud: AWS, GCP, Azure, Tencent Cloud, Alibaba Cloud **Other:** Git, FFmpeg, Docker, SQL, OpenAI, ChatGPT, Selenium

ACADEMIC PROJECTS

Distributed Databases | Individual Project: Distributed Database Techniques

Spring 2019

Generated functions to insert, query, sort and join the data from all partitions

DBMS Implementation | Team Project: BigTable Implementation

Spring 2019

- Collaborated in a team of 6 to convert an existing relational DBMS into a Bigtable-like DBMS using Java
- Refactored existing functions and wrote searching/ sorting functions to maintain DB throughout insertion

PERSONAL PROJECTS

Online Portfolio | Personal Website

Fall 2019

Designed a website portfolio using HTML5, CSS, and JS

Face Recognition | OpenCV Python Project

Fall 2019

Explored ML Library, OpenCV, to recognize a human face with a computer webcam

EXTRACURRICULAR

Discord Bot Development

Nov 2022 - Present

Maintaining bot development for a group of 100 members using Python API calls, async programming and SQL DBMS
Google HashCode Competition

• Placed 44th in US, 844th globally as a team of four in Google HashCode programming competition

National Society of Black Engineers | Corporate Liaison

Fall 2018 - Dec 2019

Arranged sponsorships with large companies and organized meetings for the general body