Sumin Cho

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EDUCATION

University of Illinois Urbana-Champaign

Bachelor of Science in Computer Science and Advertising

August 2020 - May 2023

GPA: 3.9/4.0

Relevant Coursework: Data Structures, Algorithms and Models of Computation, Computer Systems, Software Design Studio, Database Systems, Artificial Intelligence, Programming Languages and Compilers, Probability and Statistics for Computer Science, Computational Advertising, Tech and Advertising Campaigns

EXPERIENCE

Software Engineer | Motorola Mobility

September 2023 - Present

- Maintain and improve the Stability Test Automation Framework for Motorola smartphones, including dashboards, databases, log processing, and frameworks for development and execution of test cases
- Monitor the performance of stability racks; diagnose and fix failing test cases and other irregularities

Software Engineering Intern | Red Hat

May 2022 - August 2022

- Collaborated in a Scrum team to develop <u>Cachito</u>, a Python service to process and cache source code
- Added a database table (using SQLAlchemy) which stores comprehensive error logs raised by Cachito requests; increased debugging efficiency and reduced error frequency by 20%
- Extended the web API by adding filters for error origin and type using pydantic (data validation)
- Evaluated performance of Cachito by running integration tests on Docker/Podman containers

Lead Course Assistant | Data Structures

January 2022 - May 2023

- Coordinated weekly office hours, tutoring students and debugging C++ code with Valgrind and GDB
- Oversaw lab groups of over 100 students, guiding them through problems on data structures and C++

Web Developer | MUSE Research Group

December 2021 - May 2022

- Created the research group's <u>website</u> (HTML, CSS, JS) which showcases their work and members
- Designed an interactive dashboard (Plotly, Flask) with a choropleth map visualizing YouTube trends

Mobile App Developer | SmartForm

September 2020 - December 2021

- Devised a startup mobile fitness app (in Python) that provides a live feedback of user's workout posture
- Incorporated lunge pose detection into mobile app using PoseNet (TensorFlow model)

PROJECTS

Object Recognizer

Python, PyTorch, NumPy

- Trained a convolutional neural network (CNN) to classify images with 95% testing accuracy
- Built custom PyTorch Dataset, DataLoader, and model to optimize the performance of CNN

Online Course Recommender

JavaScript, MySQL, React, Node.js, Google Cloud

- Developed a web application that recommends online courses from Coursera, Udemy, and edX to users
- Managed a team of 4 members, distributing tasks and ensuring they were completed by each milestone

SKILLS

Programming Languages: Python, C/C++, Java, JavaScript, SQL, HTML, CSS, OCaml

Frameworks & Tools: Git, Linux, RESTful API, MongoDB, Neo4j, Flask, NumPy, pandas, PyTorch, Google Cloud