Kody Takada

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OBJECTIVE

I am a motivated senior in computer science pursing a master's degree in computer engineering anticipating completion May 2025 and I am seeking a software engineering internship for the summer of 2024. I am passionate about pushing the boundaries of technology and driving innovation to achieve results using my previous technical experience.

EDUCATION

University of Michigan – College of Engineering **Ann Arbor, MI**
Bachelor of Science in Engineering in Computer Science/Minor in Chemistry *May 2024*
GPA**:** 3.77/4.00
Coursework**:** Data Structures and Algorithm, Machine Learning, Web Systems, Computer Vision, Computer Architecture

SKILLS

Programming Languages: C++, C, Python, HTML, CSS, JavaScript, MATLAB, R, ARMv8
Tools: Git, ReactJS, Flask, Hadoop, SQL, Jupyter, AWS, Shell Scripting, AGILE, Seaborn, Matplotlib, Selenium, NumPy, Microsoft Suite

WORK EXPERIENCE

Cruiter.AI **Sunnyvale, CA**
Data Analytics Intern *May 2023 – August 2023*

- Created a machine learning regression model focused on calculating expected salary of tech candidates using Python based on personal attributes for our clients to find the optimal tech talent.
- Developed a normalization algorithm to join data for 600,000+ item datasets using RegEx and fuzzy matching.
- Analyzed and built figures to model the datasets using Seaborn to determine trends for future data ingestion.
- Improved productivity and collaboration by streamlining code organization through the consolidation of codebases.

The Glotzer Group **Ann Arbor, MI**
Software Intern *May 2022 – August 2022*

- Implemented a relative angular distance algorithm for our in-house Python package resulting in the reduction of neighbor-list calculations for nanoparticle simulations by over 40%.
- Adjusted the command line interface in the Python package to achieve readable output for simulation properties and improved testing readability along with comprehension using pytest.

Lesher-Pérez Research Group **Ann Arbor, MI**
Undergraduate Research Assistant *February 2023 – Present*

- Designing a custom image processing GUI to conduct image analysis on real time experiments to accurately produce desired droplet size during droplet generation.
- Reduced former processes by over 120% by utilizing Matlab to efficiently analyze batches of droplet images.
- Presented weekly experimental findings and code changes to the group, facilitating feedback and data exchange.

Engineering Center for Academic Success **Ann Arbor, MI**
Computer Science Tutor *June 2023 – Present*

- Organized 1-on-1 sessions on concepts in computer science to effectively explain and help students in course material.
- Tutored content in Data Structures and Algorithms, Computer Architecture, and Computer Theory.

PROJECTS

Search Engine | *Python, JavaScript, Hadoop, HTML/CSS*

- Designed a scalable search engine in Python, incorporating RESTful API practices to deliver accurate search results based on user queries through page analysis and tf-idf calculations.
- Calculated an inverted index of pages with Hadoop to enable efficient retrieval for improved search performance.

Instagram Copy | *Python, JavaScript, HTML/CSS, AWS, SQLite*

- Created an SQLite backed Instagram application with dynamic pages in AWS. Using REACT, the copy uses the custom REST API giving the user all the functionalities of Instagram including user authentication.

Geological Analysis Tool | *C++, Python*

- Designed a Raman spectroscopy application for soil and rock characteristics for our project team's autonomous rover.

ACTIVITIES

Sling Health at the University of Michigan, *Managing Director* *April 2023-Present*
Global Health Charities at the University of Michigan, *Founder/President* *May 2022-Present*
American Institute of Chemical Engineers, *Secretary* *August 2021-June 2023*
Mars Rover Project Team, *Science Team Member* *August 2021-August 2022*
Intramural Tennis, *Member* *August 2021-Present*