Kody Takada

Ann Arbor, MI | ktakada@umich.edu | +1(248)385-6126 | kodyt.github.io

Objective: I am a passionate and detail-oriented rising senior in computer science seeking a software engineering position. Using my proficiency in various technical fields, I am eager to contribute innovative solutions to real-world challenges, collaborate in a team, and gain practical experience while making a meaningful impact.

Education

University of Michigan - College of Engineering, Ann Arbor

August 2020 - May 2024

B.S.E in Computer Science/Minor in Chemistry

GPA: 3.77/4.00

- Awards: Dean's List, James B. Angell Scholar, Clifton S. Goddin and Reginald L. Tucker Scholarship Recipient
- Pursuing Masters of Engineering in Electrical and Computer Engineering, degree anticipated May 2025

Experience

DeveloperDB

Sunnvvale, CA

May 2023 – Present

- Data Analytics Intern Managed and organized a specialized tech recruiting product used to predict the expected salary range of potential
 - recruits for our clients and employed web scraping with Selenium to effectively collect raw data. Created a normalization algorithm for joining 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.

Lesher-Pérez Research Group

Ann Arbor, MI

Undergraduate Research Assistant

February 2023 - Present

- Designing a custom image processing GUI to conduct droplet generation analysis on real time experiments.
- Utilized MATLAB to efficiently analyze batches of droplet images to reduce former processes by over 120%.

The Glotzer Group

Ann Arbor, MI

Software Intern *May 2022 – August 2022*

- Implemented the relative angular distance algorithm in the in-house python package which reduced neighbor-list calculations by over 40%.
- Adjusted the CLI in the package to achieve readable output for simulation properties and converted current testing to use pytest for better testing readability and comprehension.

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.

Leadership Experience

Sling Health at the University of Michigan – *Managing Director*

- Managed executive board communication with 100+ members, improving organizational collaboration.
- Coordinated all sling events and competitions, including third-party site management.

American Institute of Chemical Engineers – Secretary

- Updated the Chemical Engineering community of 500+ peoples with news and events through biweekly newsletters.
- Organized the annual senior banquet at a third-party site by fundraising and coordinating with department faculty.

Global Health Charities at the University of Michigan – Founder/President

Founded a student chapter focused on combatting global health disparities through acts of services and volunteering.

Academic 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.
- Implemented a Service-Oriented Architecture approach, leveraging the Hadoop framework, to calculate an inverted index of pages, enabling efficient retrieval for improved search performance.

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

Created an SQLite backed Instagram with dynamic pages using AWS. Using REACT, the clone uses the custom REST API giving the user all the functionalities of Instagram and holds user authentication.

Geological Analysis Tool | *C++, Python*

Designed a Raman spectroscopy tool for geological analysis through an electron microscope to track soil and rock characteristics.

Skills/Volunteering

Programming Languages: C++, C, Python, HTML/CSS, JavaScript, MATLAB, R

Skills: Git, ReactJS, flask, Hadoop, SQLite, Selenium, AWS, excel, shell, AGILE methodology, RegEx, Seaborn, Matplotlib

Volunteering: 200+ hours with Global Health Charities, American Red Cross, Youth Movement Against Alzheimer, etc.