Judy Effendi

https://judzthecoder.github.io/judzthecoder/

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Professional Summary

Software Engineer with a B.S. in Computer Science and a current post-baccalaureate pre-medical student. Experienced in backend development, data engineering, web development, and clinical settings. Passionate about applying bioinformatics, AI, and software tools to improve patient outcomes and support precision medicine research.

Work Experience

University of Michigan Medicine   **Ann Arbor, MI**
Research Assistant   July 2025- Present
- Filtered and analyzed breast pathology data under the mentorship of Dr. Rouba Ali-Fehmi.
- Contributed to research on artificial intelligence and digital pathology in collaboration with Michigan Medicine faculty.
- Developed and maintained the GPALM (Global Pathology and Laboratory Medicine) website, supporting international collaboration.
- Prepared abstracts and manuscripts focused on global pathology, medical education, and AI applications in medicine.

NAAMA NextGen   **Ann Arbor, MI**
Web Developer and Research Lead   July 2025- Present
- Developed NAAMA NextGen Website using HTML, CSS and Java for 1,000+ members
- Moderated AI in Medicine panels bridging engineering and clinical perspectives
- Led research symposium.

Iam Institute of Athletic Medicine   **Auburn Hills, MI**
Medical Assistant   August 2025- Present
- Roomed patients, obtained patient medical history, monitored vital signs, drew blood and reconciled medications
- Wrote EMGS

Kidney Consultants of Michigan   **Roseville, MI**
Medical Assistant and Web Developer   June 2019- Present
- Roomed patients, obtained patient medical history, monitored vital signs, drew blood and reconciled medications
- Developed Clinic Website using HTML, CSS and Java.

Target Corp.   **Minneapolis, MN**
Software Engineer   *September 2023-May 2025*
- Developed a Kotlin based module for Kafka to achieve seamless data mirroring from production to stage.
- Implemented robust redaction mechanisms to safeguard sensitive data from being propagated to output topics in a scrum agile environment.
- Performed unit testing of endpoints to validate functionality and security measures for authorization mechanisms and maintained and optimized PostgreSQL DB for efficient data storage and retrieval.

Bosch   **East Lansing, MI**
Software Engineer, Capstone Experience   *January 2023- April 2023*
- Developed a Web Interface for HIL (hardware-in-the-loop) Benches to centralize remote access for various teams across Bosch utilizing a Flask API for an instance of a HIL that sends HTTP requests.
- Created and implemented Python-based automated test suites to test vehicle control modules and collect the necessary logs to enable development teams to fix defects and prevent safety issues in production.

Target Corp.   **Remote**
Software Engineer Intern   *June 2022-August 2022*
- Leveraged the power of Spark/Scala to develop a cutting-edge automated data comparator tool for the Data Engineering Stores Planning team, streamlining data analysis and validation processes.
- Implemented an end-to-end real-life enterprise product utilized by Target-Tech

College of Engineering, MSU   **East Lansing, MI**
CSE Outreach Administrator   *August 2020-April 2023*
- Exemplified **leadership** as one of many **lead admins** of our esteemed local and international computer science outreach programs.

- Successfully introduced the dynamic fields of Python programming and Web Development to a diverse range of students from 6th-12th grade, with an emphasis on empowering underrepresented demographics.

Computer Science Department, College of Engineering, MSU   **East Lansing, MI**
Undergraduate CSE ULA   *January 2022-April 2023*
- Actively guided a class of 30 students in debugging, problem-solving exercises, labs, and projects.
- Effectively communicated complex technical concepts in a clear and concise manner, catering to diverse learning styles and enabling students to grasp programming principles efficiently.

College of Engineering, MSU   **East Lansing, MI**
Ambassador, Women in Engineering   *January 2020-April 2023*
- Led and administered K-12 outreach activities to recruit and encourage girls to pursue careers within the engineering field.
- Encouraged opportunities for academic, personal, and professional growth by organizing, leading, and planning a 6-week Leadership Series for 30+ undergraduate Women in Engineering

Volunteer Experience
- Red Cross
- Detroit Marathon - Medical Aid

Shadow Experience
- Dr. Lawrence Rapp - Neurosurgery - 50 hours
- Dr. John Samani - Orthopedic Surgery -50 hours

Relevant Skills
- Languages: Python, SQL, Spark/Scala, Kotlin, C++, ReactJS, HTML/CSS, Flask, REST APIs
- Data/Cloud: PostgreSQL, Grafana, Google Cloud, AWS, Docker, Kafka
- Bioinformatics-Related Tools: Jupyter Notebooks, Pandas, scikit-learn, matplotlib
- DevOps/Other: Git, Jira, JUnit, Vela
- Personal: Leadership, Adapatability

Education
Michigan State University   August 2019-April 2023
B.S., Computer Science and Engineering, Minor: Spanish
Post-Baccalaureate Pre-Medical Coursework (In Progress)