Zaina Qasim

Website: https://qasimza.github.io/ • **Email: zqasim@gmail.com** • **Phone: + 1 (513) 739 4757**

EDUCATION

University of Cincinnati, OH | *GPA 3.6/4.0* **Graduated May 2023**
BS Computer Science (Honors), *Certificate: Intelligent Software Development, Minor: Mathematics*
Achievements: UC Global Scholarship/Dean's List, MHacks 13 Beta (winner in four different categories).
Leadership: Treasurer (Women in Technology), Meetings Chair (IEEE@UC).
Employment: Teaching Assistant (Foundations of Engineering Design Thinking I & II), IT Consultant (UC@IT, Lindner@IT).
Relevant Coursework: Design and Analysis of Algorithms, AI Principles and Applications, Information Retrieval, Intelligent Data Systems, Parallel Computing, Cloud Computing, Deep Learning, Linear Algebra.
Capstone Project: Music recommendation system using Spotify's API to provide personalized playlists by uniquely defining similarity through advanced user-defined filters (TuneMe).

SKILLS

Programming Languages: Python, Go, C++, Java.
Data Cleaning and Preprocessing: Regex, Data Imputation Techniques.
Data Manipulation and Analysis: NumPy, Pandas.
Data Visualization: Matplotlib, Seaborn.
Database: SQL, MongoDb.
Machine Learning: Scikit-learn, Keras, PyTorch, TensorFlow.
Cloud Platforms: AWS, Google Cloud Platform (GCP).
Web Development: HTML/CSS, TypeScript, Flask, Django, gin-gonic, Solid.JS, React, Tailwind, SUID.
Project Management: Agile, Jira, Linear.
Design: Figma, Adobe InDesign, Illustrator, Photoshop.

EXPERIENCE

Software Development Engineer, Blue Innovations Group, FL | *60+ hours/week* Jun 2023 – Present
- Full-stack development in a dynamic, seed-level, electric boat startup with rapidly evolving requirements.
- Maintaining project quality through frequent code reviews, unit, integration, manual and end-to-end tests.
- Collaborating with mechanical and engineering teams to iteratively develop models for range and runtime estimation and rigorous methodology for measuring prediction accuracy through extensive research and data analysis.
- Delivering end-to-end functionality (including UI design) for 8 different boat sensors and controls.
- Implemented a real-time weather dashboard through meteorological research and intuitive visualization.
- Developed unit conversion architecture to seamlessly handle multiple data-sources and heavy traffic.

Firmware Engineering Intern, Infinera Corporation, CA | *40+ hours/week* Jan 2022– Aug 2022
- Automated deployment of FW builds from storage server onto local testing boards.
- Led a team in creating an AI-powered Flask web app for parsing and ranking resumes, concurrently designing its UI.
- Implemented Pythonic testing framework for firmware testing as well as developed test cases for sanity testing.
- Extended and debugged the Object Help Editor GUI Tool to develop editing support for the latest project database.

ASIC Design Engineer, Infinera Corporation, CA | *40+ hours/week* Jan 2021– Apr 2021
- Developed Pythonic infrastructure for interrupt service routine (ISR) implementation.
- Streamlined test case generation through automation, optimizing efficiency and precision in the testing workflow.

Logistics Analyst, Infinera Corporation, CA | *40+ hours/week* May 2020 – Aug 2020
- Extended ASIC library analysis tool to handle single port memory cells.
- Optimized, tested, and debugged post route health check and hierarchy analyzer tools.
- Developed a LALR (1) parser and solver using pypeg2 and Google OR Tools for System Verilog style constraints.

ASIC Design Engineer, Infinera Corporation, CA | *40+ hours/week* Aug 2019 – Dec 2019
- Enhanced ASIC library analysis tool, reducing runtime by 2 hours through multi-processing.
- Engineered register access infrastructure and environment for chip validation and functional testing using gRPC.