Saketh Ogirala

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Education

University of Michigan Ann Arbor, MI

Bachelor of Egineering in Computer Science *May 2025*

- Revelant Coursework: Data Structures and Algorithms, Introduction to Computer Organization, Machine Learning, Web Systems, Artificial Intelligence, User Interface Development

Experience

Neuroprop June 2024 – Present

AI/ML Software Engineer Intern *Ann Arbor, MI*

- Contributed to the creation of NeuroProp, an application that helps lenders identify the most optimal real estate investment options based on their previous investments through reinforced and unsupervised learning methods
- Designed a PostgreSQL database to manage real estate properties, including detailed attributes such as location, price, and market trends, along with a model-generated score for each property to assess investment potential
- Built a responsive front end using HTML (Django templating), CSS (Bootstrap, custom styles), and JavaScript (jQuery, Dropzone.js, ApexCharts) to create an intuitive interface for real estate data visualization and analysis

Robert Bosch May 2023 – August 2023

Software Engineering Intern *Plymouth, MI*

- Created a Python script to automate GM's parking ECU data analysis by generating XML trees and organizing data into dedicated folders, achieving a runtime of approximately 105 milliseconds for processing over 50 data files
- Engineered an SQL-based inventory management system for the EPS (Parking) department, enhancing the tracking/resource allocation of over 50 items across 15+ benches with seamless bench management capabilities
- Assembled a Stateflow model to conceptualize OneParking feature, breaking conventional approach by consolidating 8-12 ECUs into a centralized ECU, optimizing signal transmission and data efficiency in Bosch vehicles

Robert Bosch May 2022 – August 2022

Software Engineering Intern *Plymouth, MI*

- Crafted solutions using Simulink MATLAB to simulate car LED light charging systems; achieved 5% improvement in energy efficiency compared to previous models, enhancing vehicle performance and reducing power consumption
- Assisted on PremiumTorque adaptation applying real-time steering wheel torque data to calculate optimal steering angles, resulting in a 15% increase in precision of vehicle turning points, boosting overall driving performance
- Documented 40+ customer specifications in DOORS, ensuring coverage of system and software requirements and conducted testing of these requirements using CANoe, executing real-time car simulations to validate functionality

Projects

Sign Language Interpreter | *Python, PyTorch, OpenCV* July 2024

- Achieved a CV system to recognize and interpret hand gestures for intuitive user interaction across devices
- Trained on a custom dataset, the system achieves real-time, high-accuracy gesture recognition with low latency

ScheduleSmart | *OpenAI API, SwiftUI, EventKit* June 2024 – July 2024

- Innovated ScheduleSmart for TikTok TechJam, an AI-driven application designed to optimize daily schedules
- Seamlessly integrates with Apple Calendar, offering live updates and multiple viewing options (Day, Week, Month)

Cloned Google Search Engine | *Flask, Jinja, SQLite* April 2024

- Developed a search engine, using algorithms such as TF-IDF and PageRank to ensure accurate search results
- Implemented web crawling, document parsing, and query processing, with focus on optimizing performance

Cloned Instagram Project | *AJAX, RESTful APIs, JQuery* February 2024

- Executed an application mimicking Instagram using React and AJAX for seamless client-server communication
- Utilized RESTful API to manage posts, comments, and likes, ensuring user interactions within the application

Technical Skills

Languages: Java, Python, C/C++, SQL (PostgreSQL, SQLite), JavaScript, HTML/CSS, R, Swift
Frameworks: React, Node.js, Flask, Django, Chakra-UI, WordPress, Material-UI, FastAPI
Developer Tools: Git, Docker, TravisCI, Google Cloud Platform, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse, Webpack, Babel, CANoe, Stateflow, Simulink MATLAB
Libraries: pandas, NumPy, Matplotlib, TensorFlow, PyTorch, OpenCV, jQuery, Dropzone.js, ApexCharts, Beautiful Soup, NLTK, Jinja2