

Shrisha Yapalparvi

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Education

University of Virginia, Charlottesville, VA

B. S. Computer Engineering – May 2024

Coursework: Data Structures / Algorithms, Autonomous Vehicles, AI Cyber Security

GPA: 3.94

Skills

Languages: Python, HTML, CSS, JavaScript, TypeScript, Java, Go, C, C++, SQL

Libraries: ROS, React, NextJS, Django, Flask, Git, Pytorch, SQLite, TailwindCSS, NodeJS

Tools / Cloud: Google Cloud Functions (serverless functions), Firebase, Firestore (NoSQL DB), Vercel

Work Experience

Lead Full Stack Web Developer, Hinkapin Health

November 2023 - Present

- Designed from scratch, developed, and deployed full stack web app for finding doctors, procedures, and procedure prices for a health network with an e-commerce style UI designed with **React** and **TailwindCSS**
- Deployed RESTful APIs and **microservice** based backend on **serverless functions** in **Python** and **NodeJS**
- Reduced average time to contact by 34% and increased average contact rate by 21%
- Architected cloud databases utilizing **Firestore (NoSQL)** DB for personal data and Cloud Storage for images

AV Safety Undergraduate Researcher, UVA, Charlottesville, VA

September 2023 - December 2023

- Implemented an LSTM in **PyTorch** and analyzed outputs to find markers that indicated when AV motion planning systems were under attack, and presented processed images that removed attack vectors

Full Stack Software Engineering Intern, Yext, Rosslyn, VA

May 2023 - July 2023

- Redesigned (from scratch) and implemented deployment status page to condense space while increasing relevant metrics by 35%. Set up backend in **Java** and **Go**, and built frontend with **React**
- Established Lexical Rich Text and Markdown support with unit testing within Yext Pages, allowing Fortune 500 companies to deployed to millions of end users with increased website customization
- Expanded CLI to auto-authenticate, speeding up startup and decreasing login errors by 38%
- Constructed **SQL** table with a **Go** backend to log and backfill usage data to reduce server strain by 13%

Undergraduate Researcher, UVA, Charlottesville, VA

June 2022 - May 2023

- Spearheaded a data collection application to collect and record kinematic and video data for autonomous surgical research – cutting down setup time by 81% and reducing need for specialized training
 - Designed frontend in **React** and backend in **Python** and **C++** to connect data across 5+ pipelines
 - Optimized data post-processing in **Python** / **OpenCV** and sped up processing time by 43%
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Activities

Co-Founder, Project Code

January 2022 - Present

- Co-Founded and grew a club of 50+ members at UVA to work on semester-long tech projects
- Taught club members new languages such as **Python** and **JS**, as well as tools such as git to build projects such as a stock market analysis bot, a music translation algorithm, and Stratego
- Led a team of engineers to design a U-net CNN model in **PyTorch** to segments chest X-ray images for abnormalities, including teaching ML fundamentals, creating assignments, and overseeing progress

Robotics Engineer, UVA F 1/10

August 2023 - December 2023

- Implemented autonomous driving methods including follow the gap, SLAM, and pure pursuit on a 1/10th scale car using **ROS** with speeds of up to 30 MPH. Computed on NVIDIA Jetson.
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Projects

Budget Buddy - Finance Category Winner HooHacks Hackathon

- Developed a proactive personal budgeting web app with a **Flask** backend and **React** frontend allowing users to view aggregated personal finances and see impact of purchases in real time with plaid API.
- Stored user data in **Firestore** database and queried data to a **Twilio** powered text bot operating via **Open AI's LLM API**, allowing users to determine if financial decisions aligned with their goals in real time

Split The Bill

- Trained an OCR using **Keras** and **TensorFlow** to be able to read and parse through user-uploaded images of receipts to identify individual items and costs so users can split bills between friends
- Developed a user-friendly and responsive front-end leveraging **HTML**, **CSS**, **JS**, and **Flask**