Vasu Gupta

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Experience

Software Developer @ Popin Inc.
May 2022 - present

- Developed the core features of an events app being used by UofA students.
- Full-stack web development using: Next.js, Tailwind CSS, Firebase, CI/CD using Vercel.

Student Researcher @ University of Alberta
May 2022 - present

- Measured the motions of stars in young clusters using Gaia satellite data to characterize the turbulence in interstellar gas around them.
- Wrote tools in python to perform theoretical and mathematical computations on 3D vector fields.

Software Developer Intern @ Beta Healthcare International Ltd.
May 2021 - July 2021

- Created and deployed a (Google Forms like) web application to handle form submissions and approvals.
- Used the MERN stack (MongoDB, Express, React, Node.js).
- Deployed application on local company servers.

Software Team Member @ AlbertaSat
October 2019 - January 2021

- Developed MCU software for the Ex-Alta 2 satellite.
- Developed drivers implementing serial communication protocols such as i2c, SPI, UART.
- Collaborated with the software team on GitHub (Created and handled PRs).
- Represented AlbertaSat at various events including; Engineering Open House event and "Let's Talk Space".

Electrical Team Member @ UAlberta Space Design Group
March 2020 - August 2021

- Canadian Reduced Gravity Experiment Design Challenge (CAN-RGX), SEDS Canada.
- Project: Determining Response Differences to Microgravity in Male and Female Bioengineered Cartilage Tissue.
- Assisted in designing an electrical system for the project, created electrical schematics, and presented progress reports to SEDS, CSA, and NRC representatives.

Awards & Certifications

- Machine Learning. Stanford Online, Coursera │ June 2019
- President's Award Scheme, Gold Award. Awarded by his excellency Uhuru Kenyatta (President of Kenya) │ July 2016
- Acoustic Guitar, Grade 8. University of West London │ Feb 2016
- Faculty of Engineering Academic Excellence Scholarship │ Sept 2017
- University of Alberta International Country Scholarship │ Sept 2017
- International Student Scholarship │ Sept 2017

Education

University of Alberta
Sept 2017 - Apr 2022

Bachelor of Science, Double Major in Computer Science and Physics .

Skills

C/C++   Java   Python   JavaScript   TypeScript   Next.js   React   Node.js   Git   Android Development   Express   Embedded Software   Linux   SQL   MongoDB   Firebase

Projects

Client-Server Architecutre Implementation

An implementation of a single-threaded server and client application. Programmed in C using the linux socket API.

ML model comparison

Final project for CMPUT 466 (Machine Learning) at the University of Alberta. Comparing the performance of three different ML models on a credit card fraud detection task.

KrowdTrialz

Final project for CMPUT 301 (Intro to Software Engineering) at the University of Alberta. An Android application for publishing and contributing data to statistics experiments.