Vijit Dua

✉ inbox@vijitdua.com | ⚙ @vijitdua | in @vijitdua | 📍 Davis, CA

Portfolio: https://vijitdua.com/portfolio

Education

University of California, Davis   Sept 2023 – December 2026 (*Expected*)
Bachelors of Science, Computer Science
- GPA: 3.676
- Dean's Honor List (FQ23)
- Member of Davis Competitive Programming Club

University of Hong Kong [HKU]   Sept 2024 – December 2024
Semester Exchange

Languages & Tools (**bold** = highly experienced)

- Languages: **JavaScript**, TypeScript, **C++**, **C, Python,** Java
- Frameworks & Tools: **React.js**, **React Native**, Expo, **Express.js**, FastAPI, Django, **Material UI**, HTML, CSS
- Databases: **PostgreSQL**, **MySQL**, MongoDB, SQLite, FireStore, Sequalize (ORM)
- Dev. Ops: Docker, Kubernetes, **Git**, **GitHub** CI / CD / actions, AWS (EC2 & Cognito), Digital Ocean, Firebase, NGINX, Cloudflare
- Machine Learning: PyTorch

Experience (blue = links)

KAIST (Korea Advanced Institute of Science & Technology) | Deep Learning Research [research paper]   July 2024 - July 2024
- **Selected among 18 students worldwide** for the prestigious research program.
- Developed & trained **UNet** and **Attention UNet** models to **automate road infrastructure detection** using satellite imagery.
- Achieved a **0.73 F1 score** on the final model.

Icarus Development | Team Lead — Web Development   June 2024 - September 2024
- **Led** a team of **six software engineers** and one designer, delivering a full-stack application **in under 2 weeks.**
- Utilized **React.js** & **Material UI** for front-end; **Node.js** & **Fast API** for back-end.
- Managed Linux server deployment, **NGINX** configuration, **GitHub CI** deployment, and **Cloudflare** setup.
- Developed **internal tools** including an admin panel & custom discord bot.
- Temporarily served as **mobile developer** intern, working on Davis Dot (a social app) using **TypeScript**, **React Native**, & **Expo** before transitioning to Web Dev. Team lead due to strong performance

SchoolHouse.world – Volunteer Peer Tutor [portfolio & **reviews**]   August 2022 - January 2023
- Tutored AP Physics & SAT, with **98% positive ratings** from 190+ students.
- Ranked **"Most Helpful Tutor of the Week"** five times and helped a student achieve full marks on quizzes.

Projects & Activities (blue = links)

InnoGreet | *Collaborative Innovation Platform* [showcase] [website]   September 2024 - January 2025 (*Expected*)
- **Leading the development** of a platform for connecting innovators and fostering collaboration.
- Currently, it is a project with the potential to transition into a startup based on beta launch success.
- **Technologies** – JavaScript, Next.js, React.js, Material UI, Node.js, Express.js, PostgreSQL, Sequelize, Passport.js, NodeMailer.

OutWatch | *Automatic Service Outage Monitor and Bug Reporter* [showcase] [github]   October 2024
- Developed a service monitor and bug reporter in 7 hours, sending real-time alerts to Discord.
- Technologies: Node.js, Express.js, PostgreSQL, Discord.js, Sequelize, node-cron.

TeamSync | In Progress – *Streamlined Team Management* [showcase] [github]   September 2024 - October 2024 (*Expected*)
- Developed a tool for member management and streaming administrative tasks, primarily for Discord-based teams.
- Implemented **RESTful APIs** and enabled public data display through simple GET requests for web integrations.
- Technologies: React.js, Discord.js, Express.js, Sequelize.

More: Visit Projects