Pragalv Bhattarai

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TECHNICAL SKILLS

Languages: Python, JavaScript, HTML/CSS, C
Frameworks: Django, Flask, Tailwind CSS, Bootstrap
Databases: SQL
Developer Tools: Git/Github, Docker, Postman, VMware, VS Code, PyCharm
Currently Learning: Java & Spring Boot, PostgreSQL, React.js, AWS Cloud Services (EC2, S3, Lambda)

EXPERIENCE

Software Engineer Intern April 2025 – Aug 2025
Critical Shift Corporation *Remote*

- **Developed RESTful APIs** in **Flask** to power a Vantiq dashboard by generating realistic, profile-driven data to test mesh networks, achieving **sub-200ms response times**.
- **Engineered** an **OOP-based, JSON-configurable system** for defining sensor types, ranges, and fluctuation patterns, enabling rapid customization.
- Implemented weighted random sampling and formula-based generation for accurate, scenario-specific outputs with **analytics integration**.

PROJECTS AND HACKATHONS

Georgetown University - H2AI Hackathon | *Python, Tailwind, SQLite, OpenAI API* *March 2025*

- Developed a full-stack AI-powered document summarization platform using **Flask**, **OpenAI API**, and **SQLite**, supporting **.PDF** and **.TXT** upload.
- **Designed RESTful APIs** achieving real-time summarization, **reducing required reading by ~70%**.
- **Implemented intelligent PDF text extraction** and **drag-and-drop** upload interface with responsive **HTML** and **Tailwind CSS** front-end.
- **Engineered persistent summary storage** with history tracking, word-count statistics, compression-ratio analytics

MorningBrief AI (In Progress) | *Django, React.js, PostgreSQL, OpenAI API*

- Designing an **intelligent morning dashboard** that unifies **calendar events**, **overnight emails**, **news highlights**, **weather**, **traffic**, and **stock insights** into a single, **personalized briefing**.
- Building a backend in **Django** with **PostgreSQL** to integrate multiple data sources and deliver **real-time updates**.
- Developing an **interactive React.js** front-end that presents a **visually engaging snapshot of** the day ahead.

EXTRACURRICULAR

Google Developer's Club (Sponsored by Google): Participated in workshops exploring Google technologies, including Angular and Android Studio.
Citi Technology SWE Virtual Experience (via Forage): Completed a simulation **created in partnership with Citi**, performing **UML state diagram design** for loan management workflows, **credit risk modeling research,** and **Java-based stock market risk visualization** in a simulated banking technology environment.

EDUCATION

George Mason University Fairfax, VA
B.S. Cybersecurity Engineering *Dec 2026*
Relevant Courses: *Secure Software Engineering, Operating Systems, Calculus I/II/III, Object-Oriented Model & Design*
Academic Achievements:
Dean's List: Fall 2022, Spring 2023, Fall 2023, Spring 2024, Fall 2024