

# Pranay Joshi

pranayjoshi4466@gmail.com | +1 (659) 228 1198 | linkedin.com/in/pranay-joshi-

## EDUCATION

### Bachelor of Science in Computer Science, Minor: Robotics, May 2026

The University of Alabama, Tuscaloosa, AL, 4.00/4.00

- University Honors Scholar and ACM ICPC 2023 SEC conference finalist.
- Google Summer of Code 2023 and Google Code-in 2019 Grand Prize Winner.

## WORK EXPERIENCE

### Backend Developer, Center for Advanced Public Safety (CAPS), Alabama, Aug 2024 - Present

- Spearheading development of web-based statistics platform for unlocated crashes in Alabama for public safety teams to study relevant data.
- Performing queries on department's SQL database using Golang and Next.js for seamless user experience.
- Labeled state's linknode streets and junction data including 4 counties: Lauderdale, Bibb, Madison, and Limestone counties.

### Software Developer Intern, Postman, United States, May 2024 - Aug 2024

- Developed a Source Generator for Corvus.JsonSchema, integrated Corvus APIs to automatically generate and add Schema code to user's project for compilation.
- Leveraged JSON Schema and C# as a unified source of truth for data modeling, enabled teams to generate code adhering to standardized data structures.
- Tackled nested referencing within JSON Schemas and performed Architecture Decision Records (ADRs) to document technical decisions.

### Research Assistant, Human Technology Interaction Lab (HTIL), Alabama, Jan 2024 - Present

- Collaborating with Dr. Chris Crawford on cutting-edge brain-computer interface (BCI) and (EEG) research, developing signal processing algorithms and bluetooth SDL for neurotechnology applications.
- Developing a cross-platform desktop management application using Electron and Web Bluetooth API for monitoring 4 separate data streams, live data recording, storage, and machine learning applications.
- Teaming with peers on an innovative project to control drones using brain signals, utilizing JavaScript, Python, Web Bluetooth API, and Electron for cross-platform development.

## PROJECTS

### Developer, Hoister, Nainital, Mar 2024 - Present

- Developed a user-friendly web service and app (e.g. backend/frontend) hosting platform for seamless deployment, utilizing modern technologies such as React, Next.JS, Golang, TypeScript, Kafka, Docker and AWS.
- Leveraged AWS as cloud server provider, ensuring scalability and reliability. Employed industry-standard practices and adhered to best coding principles throughout development process.

### Developer, Medico, Nainital, Aug 2020 - Dec 2020

- Engineered an AI-driven, command-line interface (CLI) and speech-based tool for detecting medical terms, leveraging NLP techniques and libraries such as Gensim, Spacy, NLTK, Pandas, and NumPy to process and analyze medical terminology.
- Served as an inspiration for two Indian colleges' final year projects, recognized by GitHub and awarded "Popular" badge for project's innovative approach and impact.

## SKILLS

Languages: TypeScript/Javascript, Golang, C#, Python, C/C++, Dart

Frameworks and Libraries: Next.js, Node.js, React, Vue, Electron, Flutter, Tensorflow, OpenCV

Databases and APIs: MySQL, Postgresql, MongoDB, DynamoDB, InfluxDB, Firebase DB, GraphQL, GRPC, Kafka

Miscellaneous: Git, Docker, Kubernetes, AWS, GCP, DigitalOcean, HTML/CSS, BitBucket/Github/Gitlab, Microsoft Office