Ayush Ravi Chandran *he/him*

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EDUCATION

University of Massachusetts Amherst   Amherst, MA
Bachelor of Science in Computer Science   Expected Graduation: May 2026
Bachelor of Science in Mathematics   GPA: 3.90/4.00
- Coursework: Artificial Intelligence, Algorithms, Calculus, Linear Algebra, Scientific Computing, Statistics, Computer Networks
- Chancellor's Scholarship, Dean's International Scholarship, Dean's Honors List for all semesters

EXPERIENCE

Instilt Educate   Remote
Head of Technical Operations, Administrative Member   July 2022 - Present
- Leading a high-performing team of **10+**, driving weekly meetings to enhance collaboration and efficiency
- Overseeing **300+** user accounts, permissions, and access control for software applications and systems
- Automated **data entry and validation** with Python and Google Sheets, reducing errors by **50%**
- Designed tools using the Notion API to streamline new member integration, cutting onboarding time by **half**

Software Developer   June 2022 - Present
- Engineered a REST API with Express.js and MongoDB, reducing data retrieval time by **30%**
- Achieved **60%** code reduction resulting in faster load times while enhancing modularity and re-usability
- Created scheduling platform using Google Calendar and Zoom APIs, automating batch schedules and saving **10+ hours** weekly

PROJECTS

RouteAble | *JavaScript, NestJS, PostgreSQL, HTML/CSS, React Native, PyTorch*   November 2023
github.com/RouteAble

- Launched a **full-stack** app in 36 hours at HackUMass to enhance **navigation** by **crowd-sourcing images** of inaccessible areas
- Designed and optimized backend database model for image and location data, improving query efficiency by **40%**
- Developed and deployed image detection and object similarity machine learning models, achieving **92%** accuracy
- Won '**Best use of Github**' Award sponsored by **Major League Hacking** for unique architecture at HackUMass
- Received '**Most Impactful**' Award at the UChicago Winter Tech Showcase '24, along with a prize of **$2,000**

Instilt Educate Website | *HTML/CSS, JavaScript, Express.js*   June 2022 – Present
edu.instilt.com

- Facilitating valuable partnerships, establishing connections with **10+ organizations globally**
- Redesigned the website's user interface to enhance navigation and usability
- Boosted application rates and website traffic by **40%** through targeted Search Engine Optimization strategies
- Automated backups and content updates, enhancing site reliability and reducing manual workload
- Integrated Google Analytics via custom **event tracking** in Google Tag Manager, monitoring backlinks and application form interactions to optimize **user engagement** and identify top referral sources

E-Learning Website | *Python, Flask, JavaScript, CSS, PostgreSQL, AWS*   June 2021
- Developed a full-stack web application for HackJA 2021, enabling **real-time** user interaction
- Established a **WebSocket connection** for live video calling, facilitating seamless collaboration between students
- Integrated Amazon S3 for storing and serving user-uploaded course materials, ensuring **scalability**
- Implemented a secure, encrypted user authentication system with PostgreSQL, ensuring data integrity

Discord Bot | *Python, PostgreSQL, Git*   March 2021
- Built moderation bot for **30,000+** member Discord community, enhancing community safety and engagement
- Integrated a PostgreSQL database to improve data storage efficiency and optimize bot performance
- Refined bot commands for role assignment and filtering prohibited content, spam, and inappropriate language

SKILLS

Languages: Python, JavaScript, TypeScript, HTML/CSS, C/C++, C#, SQL, Java, Go
Frameworks: React, Next.js, Django, FastAPI, Express.js, NestJS, React Native, Flutter, Pandas, Matplotlib, PyTorch
Developer Tools: Git, Docker, Redis, AWS, Linux, VS Code, Visual Studio, PyCharm, IntelliJ, Google Analytics