Ayush Ravi Chandran *he/him*

ayushravicha@umass.edu | linkedin.com/in/ayush-ravichandran | github.com/espiobest | espiobest.me

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, Graph Theory
- Chancellor's Scholarship, Dean's International Scholarship, Dean's Honors List

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**

Web 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
- Implemented **backend database model** to process and store image and location data
- Designed frontend using React Native with a **fluid** map UI for seamless navigation
- Deployed servers on VPS to host machine learning models for **image and object similarity detection**
- 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**

Spotify Stats Dashboard | *Next.js, React, TypeScript, Spotify API* — Github — November 2024
- Built a Spotify stats dashboard using Next.js, displaying **real-time user listening habits** from the Spotify API.
- Optimized frontend performance by leveraging **efficient data-fetching** strategies in Next.js, reducing load times
- Handled **dynamic routing** and **state management** in Next.js to display user-specific data efficiently

Instilt Educate Website | *HTML/CSS, JavaScript, Express.js, AWS* — 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
- Implemented **serverless functions** with AWS Lambda to process application submissions

E-Learning Website | *Python, Flask, JavaScript, CSS, PostgreSQL, Amazon S3* — June 2021
- Established a **WebSocket connection** for live video calling, facilitating seamless collaboration between students
- Utilized Amazon API Gateway to manage and secure API requests for live collaboration features
- Integrated Amazon S3 for storing and serving user-uploaded course materials, ensuring **scalability** and durability of static files.
- Implemented a **secure, encrypted** user authentication system with PostgreSQL, ensuring data integrity

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, AWS, Linux, VS Code, Visual Studio, PyCharm, IntelliJ, Google Analytics