Ayush Rana

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EDUCATION

Northeastern University   Sep 2021 - May 2025
Bachelor's of Science in Computer Science   GPA: 3.7/4.0
Relevant Coursework: Algorithms and Data Structures, Distributed Systems, Practical Neural Networks, Machine Learning and Data Mining, Natural Language Processing, Computer Systems, Object Oriented Design

TECHNICAL SKILLS

Languages: Javascript, Python, Typescript, Java, Swift, Go, C, C++, C#, SQL, R
Technologies: Rest APIs, Node.js, React, Express, Django, AWS, Angular, Docker, TensorFlow, Git, Pandas

EXPERIENCE

Numerated, Fintech Startup Acquired by Moody's - *Software Engineering Intern*   Jul 2024 - Dec 2024
- Designed and implemented a portfolio reporting feature using **Django** and **Angular**, enabling users to generate customizable reports used to view and compare companies across the same portfolio.
- Collaborated with product and UX teams to scope and design the portfolio reporting feature, aligning with client needs and standards. Showcased this feature in securing a major contract with a Tier 1 bank.
- Reduced errors by 15% by resolving critical categorization issues of supplemental items on the financial summary page. This improvement ensured data consistency and provided a clearer user experience.
- Increased unit and integration test coverage by 80%, leading to higher regression detection rates and reducing the need for hotfixes during bi-weekly releases.

Prepmate, Food Delivery Service Startup - *Founding Software Engineer*   Dec 2023 - Apr 2024
- **Simplified the ordering process** by implementing features like meal customization, order status updates, restaurant categorization, and filtering using **Supabase**, **TypeScript**, and **Next.js**.
- Constructed a complex multi-cart ordering system, enabling users to manage orders simultaneously. This feature increased user engagement and generated **$4,000** in additional revenue.
- Deployed a subscription model using the Stripe API for automated, fee-free weekly orders, securing $300/month in recurring revenue.

Kythera Space Solutions- *Full Stack Software Engineering Intern*   May 2023 - Dec 2023
- **Engineered microservice APIs using TypeScript, Prisma, and PostgreSQL** to enhance a satellite tracking platform, resulting in a **30%** increase in real-time visualization accuracy for satellite locations and coverage areas. This improvement directly contributed to better decision-making for satellite companies.
- **Created a modular React component library** with over 40 components, ensuring UI consistency and brand identity across three internal teams and projects. This allowed developers to reuse components, improving development efficiency and maintaining a cohesive user experience.

PROJECTS

Bindly, social media app blending accountability and betting   May 2024
- Ideated and developed front end with **Swift** and built a **RESTful API** using **Express.js** on **AWS Lambda**, leveraging **Supabase** for database, storage, and authentication.
- **Integrated Stripe and PayPal APIs** to handle secure buy-ins and payouts, and devised a comprehensive logging system to maintain accurate records of all financial transactions. This ensured reliable transactions, quick recovery and troubleshooting of payment issues, and maintained balance integrity within the app.
- Optimized media handling with pre-signed URLs and compression for efficient storage and fast load times, reducing server stress and pagination to seamlessly display media.
- Leveraged **cron jobs** for automatic storage cleanup and notifications to maximize user retention.

NBA Game Predictor   Jul 2023
- Feature engineered past 10 years of NBA game data to create rolling averages to measure game to game momentum using **Pandas**. Reduced features using Random Forest, to highlight more impactful features.
- Built **TensorFlow ANN** and **XGBoost** models to predict NBA games, achieving 95% accuracy.