

# PRANAV CHHABRA

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## EDUCATION

B.S. in Computer Science with Distinction, University of Wisconsin - Madison, USA

[Graduated: May 2024] **GPA: 3.85/4**

*Relevant Coursework: Building User Interfaces, Intro to Algorithms, Intro to Operating Systems*

## DEVELOPMENT EXPERIENCE

### Headstarter AI – Software Engineer Fellow

[Summer 2024]

- Built a **pantry tracker application** with ReactJS, Next.js, Firebase, GPT Vision API and MaterialUI.
- Implemented **AI-powered customer support** solutions using OpenAI, Next.js, AWS EC2 and AWS Bedrock.
- Created **AI-driven flashcards** with Stripe integration, utilizing OpenAI, Tailwind CSS, Next.js, and StripeAPI.
- Developing an **AI professor rating platform** with RAG, OpenAI, and vector databases.

### Capital One – Capstone Partnership

#### App Development Team Lead & Scrum Master

[Fall 2023]

- Spearheaded a 6-member Agile team to develop "MonsterRewards," an iOS app using Swift and SwiftUI. Integrated game-like elements to achieve a 20% increase in user engagement and enhanced customer satisfaction by 10% through innovative UI/UX design with Figma.
- Applied Agile methodologies, managed daily stand-ups, sprint planning, and retrospectives using JIRA, reducing project timelines by 15% and boosting productivity by 10%.
- Optimized MongoDB queries and integrated AWS services for scalable backend solutions, significantly improving team cohesion and project delivery success.

### RPA Developer Intern - AiRo Digital Labs

[Summer 2022]

- Engineered automation programs using UiPath and VB.NET, reducing manual task execution by 30% and saving 20 hours per week.
- Developed an automated Invoice Processing System, enhancing operational efficiency by 40% and reducing processing errors by 50%.

## COURSE PROJECTS

### Calmify AI: AI-Powered Flashcards for Emotional Support | [Next.js](#), [OpenAI](#), [Stripe](#), [Firebase](#)

[Summer 2024]

- Produced an AI-driven platform that generates personalized emotional support flashcards using OpenAI's GPT models, combined with facial recognition for real-time mood detection.
- Embedded Stripe for seamless subscription management, enabling premium features and enhancing monetization, with optimized performance for fast and responsive user experience.
- Implemented facial recognition using AWS Rekognition, enhancing the personalization of the flashcards, achieving **90%** accuracy in facial emotion detection and response.

### AI-Enhanced Pantry Tracker | [ReactJS](#), [Next.js](#), [Firebase](#), [GPT Vision API](#), [MaterialUI](#)

[Summer 2024]

- Built a pantry management app with AI-driven recipe suggestions, reducing manual item input by **80%**.
- Integrated GPT Vision API for photo-based item recognition, processing images with **95%** accuracy.
- Optimized the interface using MaterialUI, enhancing loading speeds by **50%** and ensuring a seamless user experience.

### Personal Portfolio Website | [React.js](#), [HTML](#), [CSS](#), [JavaScript](#), [AWS](#)

[Spring 2024]

- Constructed a secure and scalable personal website. Key technologies included S3, Lambda, API Gateway, CloudFront, and Certificate Manager.
- Deployed a serverless backend using AWS microservices such as Lambda and API Gateway, enhancing efficiency, and reducing the need for server management.
- Boosted site speed by approximately **50%** using AWS CloudFront, ensuring fast, global access.
- Amplified security through automated SSL/TLS management with AWS Certificate Manager, improving data transmission security.

## SKILLS

- Languages & Tools:** Java, JavaScript, Swift, C, PHP, Git, JIRA
- Web Development:** React.js, React Native, NodeJS, ExpressJS, Material UI, Next.js, Tailwind CSS
- Databases & Cloud:** MongoDB, MySQL, AWS, Firebase, Google Cloud Platform (GCP), Stripe API, Clerk
- AI & Machine Learning:** OpenAI, AWS Bedrock, AWS Rekognition, Spoonacular API
- Methodologies:** Agile (Scrum, Kanban, Scrumban)