International Journal of Research Publication and Reviews

GuideAI – AI Career Coach

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ABSTRACT

GuideAI is an AI-powered career coaching platform that leverages state-of-the-art technologies including React 19, Next.js 15, Tailwind CSS, NeonDB, Prisma, Clerk Authentication, Inngest, Gemini API, and Shadcn UI. The system is designed to assist users with personalized career guidance using generative AI, real-time job insights, resume reviews, and skill development recommendations. By integrating modern full-stack web technologies and scalable serverless workflows, GuideAI offers an intuitive, secure, and engaging experience that sets a new benchmark for digital career advising.

[I] INTRODUCTION

The job market is increasingly dynamic, and individuals often struggle with making informed career decisions. GuideAI is a full-stack AI solution developed to bridge this gap by delivering personalized, real-time career advice using natural language understanding and large language models. The frontend is built using React 19 and Tailwind CSS, while Next.js 15 serves the server-side rendering and routing. User authentication is securely managed with Clerk, and NeonDB with Prisma ORM ensures seamless data persistence. Event-driven flows are orchestrated through Inngest, and Gemini API powers the AI responses.

[II] LITERATURE REVIEW

Existing AI platforms like LinkedIn Learning, Coursera Career Coach, and Rezi offer career support in fragmented ways. This project builds on academic research in NLP, resume parsing, and LLM fine-tuning. Open-source UI libraries such as Shadcn and tools like Prisma with NeonDB integration enable robust backend services. Gemini API from Google offers contextual awareness and better reasoning compared to older models like GPT-3, making it ideal for personalized career coaching applications.
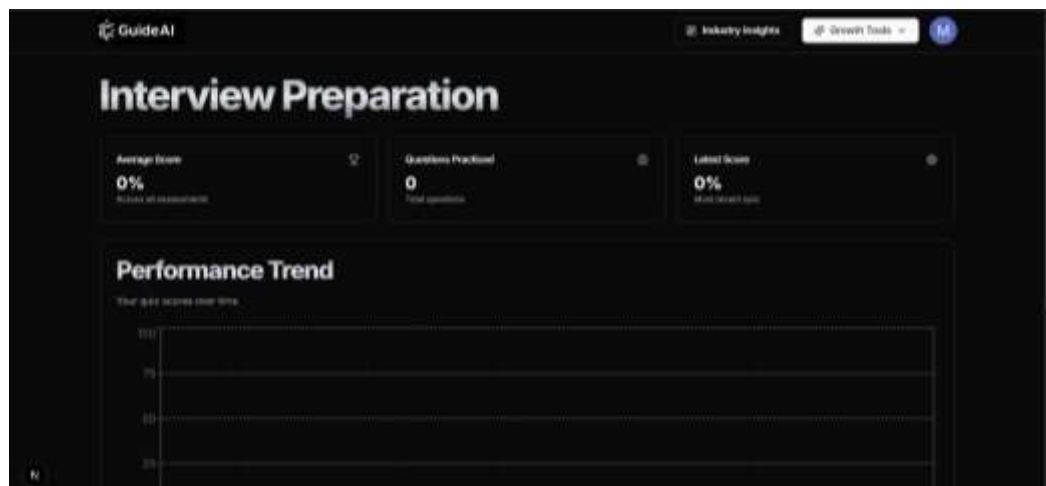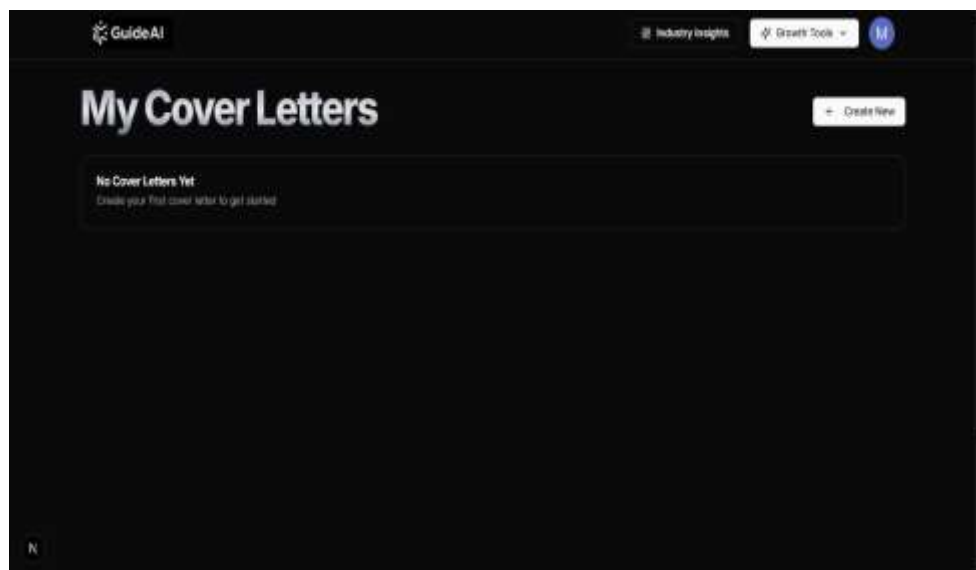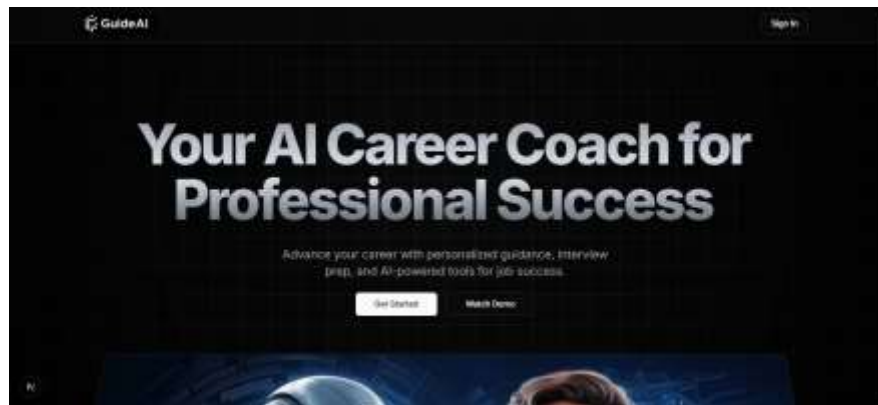
[III] PROPOSED METHODOLOGY

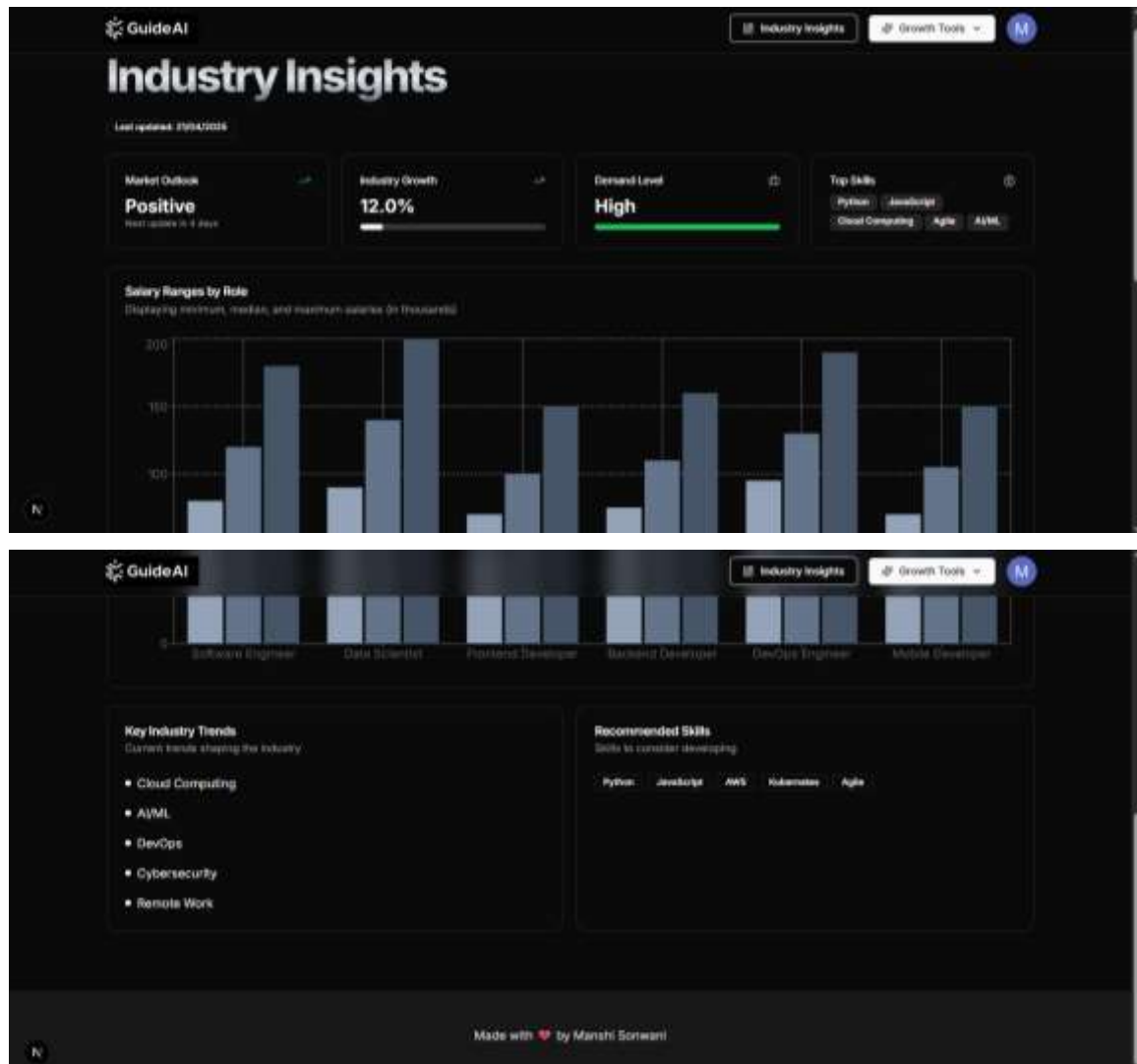The development process followed these stages:

1. Frontend Development using React 19 with Next.js 15 for dynamic routing and SSR, styled with Tailwind CSS and Shadcn UI components.

2. Backend and DB Layer via NeonDB (serverless Postgres) and Prisma ORM for managing user sessions, preferences, and history.

3. Authentication handled securely with Clerk, offering email/password, social logins, and session management.

4. AI Integration through Gemini API for generating personalized responses to career queries.

5. Serverless Events via Inngest for processing resume uploads, skill matching, and generating weekly reports asynchronously.

6. Testing and Deployment on Vercel with CI/CD pipeline integration.

[IV] RESULTS AND DISCUSSION

GuideAI successfully enables users to interact naturally and receive meaningful career advice. It allows resume uploads for evaluation, recommends upskilling paths, and generates personalized career roadmaps. Testing showed strong API response times, secure session handling, and positive UX feedback. Potential improvements include multi-language support and real-time chat with mentors.

[V] SNAPSHOTS

[VI] CONCLUSION

GuideAI represents a powerful blend of AI and modern web development to solve a pressing real-world problem—career planning. With technologies like Gemini API and Inngest, it provides smart, scalable, and secure services to users. This project showcases full-stack proficiency and practical AI implementation, making it a great addition to any software portfolio.

[VII] FUTURE SCOPE

• Integration with job boards for real-time listings.

• Video resume analyzer and portfolio builder.

• Cross-device sync and PWA support.

• Support for non-tech career paths.

• AI-powered interview simulation using voice.

[VIII] REFERENCES

1. Vaswani et al., "Attention is All You Need", NeurIPS 2017.

2. Gemini API Documentation – Google AI

3. Prisma ORM Documentation

4. Clerk.dev Authentication Docs

5. Inngest Serverless Event Platform

6. Tailwind CSS and Shadcn UI Docs

7. Next.js 15 Official Documentation

8. React 19 RFC and Official Guide

9. OpenAI & Google Research on Career Path Optimizati