SIDHARTH RAJ KHANDELWAL

Jersey City, NJ | sid_rk@outlook.com | (480) 241-8791
LinkedIn | GitHub | Published Paper | Portfolio

PROFESSIONAL SUMMARY

AI driven Full Stack Developer with 4+ years of experience specializing in React, TypeScript, .NET, Python and building scalable, high-performance web applications. Proven ability to translate complex UI/UX designs into responsive, user-centric interfaces. Proficient in modern state management, data visualization, and integrating with cloud services like Azure. Skilled in Agile methodologies and CI/CD practices to deliver robust solutions.

EDUCATION

Pace University, New York, NY
M.S. in Computer Science (Full Stack Development) – GPA: 3.9   **May 2025**

The National Institute of Engineering, Mysore, India
B.E. in Electronics & Communication   **Sept 2020**

EXPERIENCE

We Rebel LLC – Full-Stack Developer, New York, NY   **Sept 2025 – Present**

– Led end-to-end development of Common Works Registration (CWR) automation pipelines for ASCAP and MLC, implementing CISAC standards and scalable file generation to streamline royalty claims.
– Integrated Persona identity verification for artist onboarding, Stripe for automated royalty payouts, and Muso API for copyrighted artwork sourcing.
– Connected Spotify API for real-time song metadata enrichment and built AI-powered artist agents to automate catalog management and royalty insights.
– Implemented background scheduling with Django Q for automated submissions, acknowledgments, and tracking of royalty workflows across collection societies.

We Rebel LLC – Software Engineer Intern, New York, NY   **Jun 2024 – Apr 2025**

– Developed high-quality, reusable components using React and TypeScript for a music publishing platform, utilizing hooks for optimal state and lifecycle management.
– Collaborated closely with UI/UX designers to translate Figma mockups into pixel-perfect, responsive user interfaces, ensuring an intuitive and engaging user experience.
– Integrated Expo for streamlined deployment & continuous over-the-air updates, reducing deployment times by 40% while maintaining high-performance standards.

TietoEVRY – Software Engineer, Bengaluru, India   **Feb 2021 – Aug 2023**

– Developed and enhanced scalable enterprise software using .NET MVC, C#, and LINQ, focusing on performance and maintainability for backend integrations.
– Maintained containerized CI/CD pipelines using Docker, Azure DevOps, and Git, ensuring reliable and agile delivery cycles for production environments.
– Led the modernization of legacy Java-based systems to a .NET architecture, improving system efficiency and reducing maintenance overhead.
– Developed 30+ automation tools using Microsoft Power Platform and managed 50+ SharePoint sites.

PROJECTS

Virtual Room Generator – AI Interior Image Generation (Together.ai FLUX, Streamlit)   **Sept 2025**

– Built a Streamlit app that generates interior room images from text prompts using the Together.ai Inference API with Black Forest Labs' FLUX model.
– Added style presets (e.g., Scandinavian, Industrial, Minimal) and controls for room type, color palette, and lighting via prompt templating and negative prompts.
– Implemented seed/batch controls and result caching to produce consistent variations while reducing latency and API usage.

Chat-to-PDF – Conversational Document Assistant (AWS Bedrock, FAISS, LangChain)   **Aug 2025**

– Built an AI system that enables natural-language Q&A over PDF documents by combining FAISS vector search with Bedrock-hosted LLMs.
– Engineered a scalable RAG (Retrieval-Augmented Generation) pipeline for accurate context retrieval from large technical PDFs.
– Improved relevance by 20% through chunking strategies and semantic embeddings fine-tuned for document comprehension.

Lyric Style Distiller – AI Lyrics Generator (LLaMA, Streamlit)   **July 2025**

– Designed an AI-driven lyric generator capable of producing multilingual rap/poetry in user-specified styles using LLaMA-4 on AWS Bedrock.
– Implemented real-time user interface in Streamlit with style controls (e.g., rhyme density, mood, and cadence).
– Optimized inference with caching and throttling, reducing response latency by 30% for high-volume prompts.

CVine – An AI Wine Identification and Recommendation App   **Feb 2025 – Apr 2025**

- Achieved 95% accuracy in wine bottle identification using Google Vision API (OCR) with 90% text extraction accuracy.
- Backend services using GraphQL API for efficient data handling and deployed backend on Render & frontend on Vercel.
- AI-based recommendation and conversational system enabling context-aware wine discovery over 8,000+ entries.
- Implemented interactive data visualizations using Recharts to display wine characteristics and user ratings, enhancing data comprehension and engagement.

PaceX – University Social Media Platform (MERN, Firebase, Google Maps)   **Feb 2025 – Apr 2025**

- Developed core social functionalities including Posts, Stories, and real-time Chatbox messaging.
- Implemented secure marketplace with Google Maps API for precise location tracking to facilitate transactions.
- Leveraged MongoDB & Firebase for efficient real-time data handling, user authentication, & robust backend support.
- Managed complex application state for real-time features like messaging and notifications using Redux Toolkit, ensuring a consistent user experience.

TECHNICAL SKILLS

Languages: TypeScript, JavaScript, Python, C#, SQL
Frontend: React, Next.js, Tailwind, Material UI, Streamlit, HTML5/CSS3
Backend & APIs: Node.js, Express.js, GraphQL, REST, Django, .NET MVC
AI/LLM AWS Bedrock, LLaMA, OpenAI, Mistral, LangChain, FAISS, Prompt Engineering, RAG Pipelines
Databases: PostgreSQL, MongoDB, Firebase (Firestore), MySQL
Cloud & DevOps: AWS, Azure, Docker, Git, Azure DevOps, Vercel, Render, CI/CD