Taranveer Anand

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EDUCATION

Case Western Reserve University   Cleveland, OH

Bachelor of Science in Computer Science, Minor in FinTech   *Expected May 2026*
- **Relevant Coursework:** Object Oriented Programming, Algorithms, Artificial Intelligence, Software Craftsmanship, Software Engineering, Discrete Mathematics, Linear Algebra, Probability & Statistics, Operating Systems & Concurrent Programming, Calculus I-III, Security, Web Development, High Performance Computing, Database Systems, Security

EXPERIENCE

Founder   June 2025 – August 2025

Aionix.dev
- Developed AI-powered automation solutions for U.S. based companies, delivering custom chatbots, voice AI agents, and CRM integrations to streamline customer engagement and automated lead generation.
- Engineered multi-channel outreach campaigns..
- Deployed cross-channel automation workflows integrating Instagram, LinkedIn, and email for scalable client acquisition and engagement tracking.

Database Developer Intern   Sept. 2022 – Dec. 2022

Guru Amardass Private Limited
- Developed Python scripts for data migration and SQL query optimization, reducing processing time by 40%.
- Built data pipelines to process large datasets efficiently, optimizing resource allocation for improved performance.
- Assisted in implementing machine learning models for business process automation, enhancing predictive analytics for inventory management.
- Worked closely with cross-functional teams to debug ERP-related issues and deploy scalable solutions to improve workflow efficiency.
- Designed dashboards using SQL and visualization tools to help stakeholders interpret business insights effectively.

PROJECTS

BrainWave | *React, Supabase, WebRTC, OpenRouter AI API, Flask, Authlib, Flask-SQLAlchemy*   Jan 2025 – May 2025
- Built real-time peer-to-peer learning platform with integrated chat, file sharing, voice/video conferencing (WebRTC), shared calendar scheduling, virtual whiteboard, and interactive quizzes for collaborative study sessions.
- Migrated backend from Flask/SQL to Supabase-managed infrastructure (PostgreSQL, Row Level Security, real-time subscriptions, file storage) with OAuth 2.0 authentication for scalable group management.
- Integrated AI assistant powered by OpenRouter (DeepSeek) to analyze chat messages and shared files, generating contextually relevant study aid responses.

Crypto-Tracker | *React, Supabase, Solana/Web3 SDKs*
- Built a full-stack crypto/stock analytics platform with real-time dashboards, Solana trading intelligence modules, and portfolio management, leveraging React Query, Supabase, and multiple blockchain SDKs.
- Designed a glassmorphic UI framework (shadcn-ui, Radix, Tailwind, Lucide) with theme persistence, routed layouts, and reusable data hooks for wallet monitoring, trend detection, and AI-driven trading signals.
- Authored scalable architecture docs outlining prediction pipelines, API integrations, and cross-chain analytics workflows, bridging mock interfaces into production-ready intelligence tools.

SeeCare | *FastAPI, MongoDB, AWS S3, AssemblyAI SDK, SpeechRecognition, MoviePy*   W25 – Best Senior Project Award
- Developed privacy-first mobile memory aid using facial recognition and conversation transcription to support dementia patients, reducing anxiety and caregiver burden through on-device processing and encrypted storage.
- Implemented real-time face detection with AWS Rekognition and DeepFace embeddings with DBSCAN clustering for unknown face grouping, enabling reliable person identification.
- Built conversation capture system with wake-word activation using Expo Audio, integrating AssemblyAI for speech-to-text with speaker diarization and OpenAI GPT-3.5 for intelligent conversation summarization.

Other Notable Projects
- Built a memory allocation simulator in C to analyze heap fragmentation, simulating random allocations and frees with a seeded random number generator.
- Developed an AI agent in Java to play the game Sepia using state space planning, A* for optimal pathfinding, and Minimax with Alpha-Beta Pruning for strategic decision-making, ensuring a robust and winning strategy against opponents.

TECHNICAL SKILLS

Programming Languages: Python, C, C++, Java, JavaScript, TypeScript, Rust
Frameworks & Libraries: PyTorch, TensorFlow, Scikit-learn, React, FastAPI, OpenCV, LangChain, Numpy, Pandas, Matplotlib, Django, Flask, TailwindCSS, shadcn-ui, Radix UI
Tools & Platforms: AWS, SQLite, MongoDB, ChromaDB, Figma, Docker, Git, GitHub, Bash, Linux, Jupyter, Blockchain APIs, Supabase, PostgreSQL, WebRTC, Redis, GCS