Jaiveer Bassi

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leetcode.com/u/imjbassi/

Education

Grand Canyon University May 2024 – Oct 2025

MS in Computer Software Engineering *Phoenix, AZ*

- Conducting graduate-level research on secure embedded AI systems and advanced model deployment.

University of Silicon Valley May 2021 – Aug 2023

BS in Computer Science *San Jose, CA*

Solano Community College June 2020 – May 2021, Aug 2025 – Present

Computer and Information Sciences; Philosophy *Fairfield, CA*

Experience

Kaiser Permanente Regional Laboratory Oct 2023 – June 2024

Software Developer *Berkeley, CA*

- Developed a full-stack web application using React, Express, and SQL for uploading and viewing lab instrument data.
- Built RESTful APIs, implemented frontend interfaces, and designed relational database schemas to support lab workflows.

Freelance Full-Stack Developer June 2024 – Aug 2024

Freelance Developer *Remote*

- Designed and deployed a SaaS project tracker using React, Node.js, and MongoDB with OAuth login.

Research

Evaluating Transferability of Adversarial Attacks Across Machine Learning Models | *Adversarial AI, CNNs*

- Analyzed cross-architecture adversarial attack transfer using FGSM, PGD, and CW on ResNet, VGG, and MobileNet (CIFAR-10).
- **DOI:** 10.13140/RG.2.2.16410.76489

Local Deployment of Transformer-based Code Assistants | *LLMs, Inference Optimization*

- Benchmarked local LLMs (StarCoder, CodeT5) for Python code generation; evaluated latency, accuracy, and feasibility in VSCode.
- **DOI:** 10.13140/RG.2.2.30622.86081

Brain Tumor Classification with Pretrained CNNs in PyTorch | *Deep Learning, Medical Imaging*

- Built a reproducible ResNet-18-based classification pipeline for brain MRI scans using transfer learning and PyTorch.
- **DOI:** 10.13140/RG.2.2.21638.28484

Projects

Adversarial Attack Visualizer | *PyTorch, Python, OpenCV, CUDA* [GitHub]

- Designed a GUI tool to visualize adversarial attacks (FGSM, PGD, C&W, DeepFool) with real-time image comparisons, perturbation maps, and 3D surface plots.

Chess AI Engine Using Reinforcement Learning | *C++, PyTorch, Python, PyGame* [GitHub]

- Built a self-play chess engine with a C++ backend and PyTorch network, featuring bitboard move generation and real-time GUI visualization.

MedStract.net | *Streamlit, BioBERT, PubMed API, UMLS, Python*

- Built a biomedical research platform with PubMed integration for querying abstracts, summarizing with BioBERT, and visualizing author-citation networks and keyword clusters.

CareerTuner.org | *OpenAI, React, Node.js, Supabase, Tailwind, PDFKit*

- Developed and deployed an AI-powered resume analyzer with GPT-based feedback, ATS scoring, skills matching, Supabase backend, Tailwind UI, and PDF export.

Technical Skills

Languages:	Python, C++, JavaScript, Java, SQL, .NET, Node.js, R, HL7, HTML/CSS
Technologies:	React, Express, Flask, Streamlit, PyGame, XCode, Unity, Unreal Engine, VSCode, Git, AWS, Docker, Nginx, OpenAI Codex, Supabase, Tailwind
Libraries/Tools:	PyTorch, HuggingFace Transformers, NumPy, Pandas, Scikit-learn, BioBERT, BioPython, Entrez, Matplotlib, PDFKit, OpenCV, CUDA, pybind11

Certifications

IBM Artificial Intelligence Fundamentals Aug 2025
Credential ID: 9499939c-56c2-4760-9ccd-b8399fd97d31

Stanford Fundamentals of AI and Machine Learning in Healthcare Jun 2025
11 AMA PRA Category 1 Credits

Google Project Management Professional Certificate Sep 2024
Credential ID: DQ3EEK89IWI6

Google IT Support Certificate May 2021
Credential ID: 6KPKTL6896VT