Akash Danda

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EDUCATION

University of Illinois Urbana-Champaign — Champaign, IL
Computer Science + Anthropology, 3.8 GPA — *May 2027*
Relevant Coursework: Data Structures and Algorithms, Calculus III, Linear Algebra, Discrete Structures, OOP, Statistics and Probability, Physics C: Mechanics

EXPERIENCE

Software Intern — May. 2025 - Present
Tightrope Interactive — *San Francisco, CA*
- Validating & labeling financial documents to uptrain custom OCR models on GCP, **achieving a 0.91 F1 score**
- Training YOLOv11 model on **17k+ PDFS** to detect layout type(**0.79 accuracy**) & improve OCR performance
- Creating LLM-powered APIs in Python with Streamlit & Flask to validate **100K+ PDFs**; **boosted token efficiency & throughput by 110%** via batch processing; Leveraging Docker for scalable deployment

Software Engineer — Aug. 2024 – Present
Disruption Lab at Gies — *Champaign, IL*
- Developed real-time lip syncing algorithm for VR by analyzing the volume of WAV outputs from TTS API
- Optimized player movement in Unity by implementing C# scripts **improving frame rate stability by 25%**
- Implemented a graph backend with Neo4j to optimize client project management & dependency tracking

Software Lead & Vice President — Aug. 2022 – April 2024
First Robotics Competition 9125 — *Livermore, CA*
- **Enhanced autonomous scoring by 100%** through the integration of computer vision algorithms and control loops, enabling real-time object detection and precise robot alignment.
- Led development of scalable Java systems and fine-tuned PID control logic, **cutting latency by 30%**

Published Researcher — June 2022 - July 2023
Curieux Academic Journal — *Remote*
- Benchmarked machine learning models for obesity classification through **13 factors** and optimized data preprocessing for **2000+ individuals** with Pandas/Numpy/Scikit-Learn

PROJECTS

LicenseTracker | *YOLOv11, Roboflow, Streamlit, AWS EC2, S3, Textract* — Summer 2025 - Current
- Fine-tuning YOLOv11 on **10k+ license plate images**, achieving **mAP@50 of 0.96** for high-accuracy detection
- Building a real-time recognition system using AWS Textract and Streamlit for OCR-based output
- Deploying the system on AWS EC2; image storage and retrieval through AWS S3 buckets for scalability

SmartSend | *JS, Chrome Extensions API, Node.js, OpenAI API, HTML, CSS* — Summer 2025
- Built Chrome extension with Manifest V3 for AI-driven email replies using the OpenAI API & DOM extraction
- Developed a Node.js + Express backend to securely route API calls and manage request handling

Therapist.AI | *React, Node.js, Firebase, HTML, CSS, OpenAI API* — Summer 2025
- Built AI-driven mental therapy platform using GPT LLM to facilitate interactive therapy sessions
- Utilized React and Node.js for full-stack development and Firebase for authentication/data storage

TECHNICAL SKILLS

Languages: Python, Java, C++, C#, Javascript, HTML, CSS, SQL, Cypher
Frameworks/Libraries: React, Node.js, Express, Flask, Django, Streamlit, Firebase, Next.js, Tailwind CSS, Pandas, NumPy, Ultralytics, Matplotlib, Neo4j, WPIlib, PostgreSQL
Developer Tools: Git, Docker, Microsoft Azure, Google Cloud Platform, AWS, VS Code, Google Colab, Thunder Client
Awards: Eagle Scout, USACO silver, FRC Highest Rookie Seed @ Worlds, 1st at ITF Taekwondo Nationals