

Taufiq Dhanani



Boston, MA – taufiqd@pm.me – me.dhanani94.com

EXPERIENCE

- Cellino Biotech – Sr. Backend Engineer** – Cambridge, Massachusetts **February 2022 – present**
- Led the technical strategy and development of cloud-based Machine Learning services for autonomous iPSC growth and expansion, encompassing a complex pipeline of fiducial-based registration, tile processing, deep learning, reinforcement learning, and heuristic algorithms for laser instructions.
 - Architected scalable software subsystems and collaborated with product, ML, and hardware engineering teams to define OKRs, serving as the primary technical point of contact and ensuring alignment across cross-functional teams.
 - Provided technical training and presentations to biologists and scientists on platform usage, while actively supporting the software and QA teams in tracking progress and ensuring timely releases.
- Avitas a Baker Hughes Venture – Sr. Analytics Engineer** – Boston, Massachusetts **February 2018 – February 2022**
- Architected and implemented a cloud computer vision system to use aerial and stationary sensor data to detect and quantify methane emissions, oil leaks, and other inspection items for the O&G industry. Deployed on AWS using Docker and Kubernetes that is configurable by customers and resources are spun up on demand and can scale to zero.
 - Efficiently solved challenging problems such as semantically fusing 2D aerial imagery detection with 3D assets in the real world using deep learning, multi-camera geometry, and Hungarian matching. Models were trained using state of the art algorithms using PyTorch, TensorFlow, and Darknet.
 - Scrum Master for the machine learning team and the computer vision team as well as liaison between the application platform team and the analytics team.
- General Electric – Digital Technology Leadership Program** – San Ramon, California **July 2016 – February 2018**
- Created predictive models using support vector machines for time series data from industrial assets to reduce unplanned equipment downtime months in advance.
 - Created a package to encrypt, transfer and store highly sensitive industrial data without foregoing efficiency that was benchmarked to be eleven times faster than the company's previous solution.
- Visa – Software Engineer Intern** – Foster City, California **June 2015 – August 2015**
- Developed a full stack web application for internal atomization using Angular, Express, and DB2 for clearing and settlements.

EDUCATION

- Georgia Institute of Technology** – Online Campus **August 2017 – May 2021**
Master of Science in Computer Science: Computational Perception and Robotics Specialization **GPA: 3.8/4.0**
- Georgia Institute of Technology** – Atlanta, Georgia **August 2012 – May 2016**
Bachelor of Science in Computer Science: Information Internetwork and People Threads **GPA: 3.8/4.0**
Faculty Honors and Dean's List

SKILLS

- Programming:** Python (PyTorch, Numpy, Pandas, OpenCV), SQL, ZSH/Bash
- AI/LLMs** GitHub Copilot, Windsurf, JetBrains AI, ChatGPT, Gemini, DeekSeek (via Ollama)
- Technologies:** GCP/AWS, Kubernetes, Docker, Unix, Postgres, Redis, RabbitMQ

Volunteer Experience

- Camp CONNECT** – Virtual **December 2020 – July 2021**
Group facilitator for a virtual camp that created a safe space for high school students to explore concepts relating to the theme of Climate Change and Environmental Action as well as express themselves and build bonds with their peers from 37 different countries.
- AKES Winter Upgrade Program Teacher** – Khorog, Tajikistan **December 2018 – January 2019**
Group facilitator for college students that engage in multiple service opportunities for the City of Los Angeles and participate in discussions that expose the multidimensionality of problems such as homelessness, food shortages, and refugee crises.