RAMAN ARORA

Software Engineer & Product Designer | Experience in Startups, ML, Full-Stack, Design & Research

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EDUCATION

UNIVERSITY OF CALIFORNIA, LOS ANGELES — **Los Angeles, CA**

Bachelors of Science in Computer Science & Engineering — *Expected to Graduate in 2028*

- Cumulative GPA: 4.0

DUBLIN HIGH SCHOOL — **Dublin, CA**

SKILLS

- **Computer Science:** Python, Java, C++, Machine Learning, LangGraph, LLM, Neural Networks, CNN, SVM, MCP, YOLO, HTML, CSS, JavaScript, React, Tailwind, Node.js, Express, MongoDB, MySQL, REST API, FastAPI, API, AWS (S3 & Lambda), Weaviate, Vector Embedding
- **Bioinformatics:** Schrödinger Maestro, AutoDock Vina, VSFlow, PyMOL, AlphaFold
- **UI & Digital Media:** Adobe Photoshop, Adobe Premiere Pro, Figma, Canva, MS Office

PROFESSIONAL EXPERIENCE

AXIUM, **FOUNDERS INC.**

Technical Team Lead — **May 2025 - August 2025**

Founders Inc. Off-Season - San Francisco, CA (Startup incubator program with < 2% acceptance rate)

- Built, alongside founders, a pre-seed Robotics-as-a-Service startup that develops robotic arms for any manufacturer to detect & sort out defective products in their assembly lines
- Deployed the company's FastAPI & React full-stack website with modernized UI/UX and a real-time dashboard monitoring all product-line related analytics reported by clients' robots
- Utilized AWS to upload the robot's live camera feed to S3 buckets & MongoDB and then display defects real-time using Lambda functions & client-side polling
- Created a LLM-powered agent that classifies defects off of S3 images and summarizes results in automated reports, streamlining client insights and enabling a pilot program with Delphon (biomedical client)

TERMINAL33

ML Engineer Intern — **May 2024 - September 2024**

Up-and-coming stealth startup that provides AI-based services for customers using e-commerce based platforms

- Researched and evaluated various NLP-based searching models that could improve product result generation across e-commerce catalogs
- Interacted with OpenAI and CLIP models to generate and compare vector embeddings of text and images
- Indexed & stored information into vector databases like Weaviate, and performed vector similarity searches using search queries to create an optimal searching framework for future clients

PROJECTS

KERYX: COLD EMAILING AGENT — **October 2025 - present**

- Co-founding a startup that automates the entire cold-emailing pipeline for students seeking jobs or research opportunities, from identifying relevant professionals to generating personalized outreach at scale
- Utilized Unipile and Apollo API to retrieve recruiters and jobs across LinkedIn, and leveraged LLMs for semantic filtering of job postings based off of users' résumés and intelligent recruiter–job matching
- Developing a full-stack platform using React & FastAPI along with a LangGraph agentic framework to scrape professionals' contacts, parse their lab or job requirements, and send AI messages en-masse

OLFACTORY RECEPTOR BASED CANCER DRUG DISCOVERY: BIOINFORMATICS — **March 2024 - January 2025**

- Independently led group to discover two drugs capable of binding to olfactory receptors and annihilating prostate cancer cells, placing second categorically at Regeneron's International Science & Engineering Fair
- Designed a novel *in-silico* pipeline in collaboration with biochemists from UCSF and University of St. Joseph to screen through 1M+ compounds using HTVS-based molecular docking in Schrödinger Maestro
- Developed & trained a support-vector machine (SVM) using only 30 known agonists and data-augmentation techniques like SMOTES and DUDE non-agonist decoys to determine the bioactivity of drugs