TANUSH CHOPRA

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EDUCATION

Bachelors of Computer Science, Georgia Institute of Technology — Expected Graduation Date: **May 2025**

Cumulative GPA: *4.0/4.0*

Relevant Coursework: *Linear Algebra, Discrete Math, Data Structures and Algorithms, Algorithm Honors, Knowledge-Based AI, Natural Language Processing [NLP], Machine Learning, Computer Vision [CV], Deep Learning, Automata and Complexity*

SKILLS

Languages	Rust, Go, Python, Java, JavaScript, SQL, GraphQL, C++
Data Technology	PostgreSQL, SQLite, RocksDB, AWS, GCP, Firebase, Selenium
Frameworks	Flask, FastAPI, TensorFlow, PyTorch, SKLearn, OpenCV, Kafka
Development Tools	Git, Figma, VSCode, Eclipse, Kubernetes, Postman, Insomnia

EXPERIENCE

Full Stack Engineering Intern, DocuSign Inc. — *San Francisco, CA* • May 2023 - August 2023

- Developed an internal tool with real-time search capabilities, enabling IT professionals to address employee queries promptly.
- Integrated advanced criteria setup for DocuSign app administrators ensuring seamless employee management.
- Leveraged **Django** and **Vue** on **AWS** infrastructure. Incorporated **Okta** for robust security, and achieved a significant boost in **SQL Server** query performance (∼6x speed up).
- Elevated user security through the introduction of **Identity and Access Management (IAM)** principles.
- Achieved a remarkable decrease in Mean Time To Resolve from ∼29 hours to ∼3 hours (∼10x improvement).
- Received positive feedback after demoing to VP of Global IT and CIO of DocuSign.

Chief Executive Officer, Locab Inc. — *Remote* • May 2021 - March 2022

- Led a cross-functional team of 8 in developing an **NLP**-driven extension to offer AI-generated writing insights.
- Integrated state-of-the-art models like **Attention-based Transformers** and Google's **PEGASUS** for precision feedback.
- Crafted a responsive **Flask** backend, implemented NLP model training and achieved a 100x boost in server performance.
- Managed workflow through agile methodologies, utilizing **Trello Boards** and systematic reviews.
- Garnered interest from Uber's content strategy division.

Researcher, Teachable AI Lab — *Atlanta, GA* • August 2022 - Present

- Collaborated with Prof. MacLellan and graduate students on human-centric **AI/ML** models and **Cognitive AI** systems.
- Repurposed the **COBWEB** clustering system for enhanced **language modeling**, achieving a 25x performance uplift in the **Python** implementation.
- Delivered a high-performance **C++** variant of COBWEB, resulting in a ∼100x speed improvement.
- Pioneered research in **Inverse Reinforcement Learning (IRL)** and **AI Planning** for human-like agent behavior.

Software Engineering Intern, Kinetic Reality Inc. — *Sunnyvale, CA* • June 2021 - October 2021

- Engineered an **iOS**-centric **AR** application using **Swift** to capture and relay **LiDAR**-derived body movement insights.
- Aimed to elevate athletic performance through data-driven feedback, comparing real vs. simulated motion.
- Contributed to beta testing activities in preparation for a significant funding round.

PROJECTS

Quibble Championed an **AI**-driven educational platform, furnishing students with quality resources through an adaptive **UI**. (Project link)

AnimeQ Devised an **ML**-oriented algorithm via **PyTorch**, employing an **Attention-based CNN Sparse-VAE** to assess manga-to-anime adaptation viability.

Ludis Orchestrated the development of a sports-centric social platform, leveraging **Flask**, **Python**, and **PostgreSQL**, to connect users around shared athletic interests.

IFF Crafted an **NLP**-infused browser extension using technologies like **Python**, **Flask**, and **TensorFlow** to discern political biases in news, achieving 83.4% accuracy. Hosted on **Google Cloud Platform** and acclaimed with a top rating on the Google Web Store. Ongoing enhancements focus on ML capabilities and user-centric displays.

ClassNet Conceived a cutting-edge **Computer Vision** model using **TensorFlow** and a tree of **CNN** classifiers. The model not only minimized computational strain but also secured a staggering 98.7% accuracy on the Mini ImageNet dataset.

ACCOMPLISHMENTS

Hackathons

Won 2 hackathons: HackItShipIt and DataDayGrind. *Participated in 9 hackathons to date.*

Alameda County Science and Engineering Fair

Won 2nd place in the Math and Computer Science Category. *Performed Longitudinal Study on Political Bias in News-based Media.*