TANUSH CHOPRA

+1-415-316-4365 ◇ Pleasanton, CA ◇ tanushchop@gmail.com ◇ github.com/Bluefin-Tuna

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, Computer Organization and Programming, Systems and Networks*

SKILLS

Languages	Python, Go, Java, Kotlin, JavaScript, HTML, CSS, C/C++, Swift, Rust
Data Technology	PostgreSQL, SQLite, SQL Server, MongoDB, Redis, Kafka, Tableau, Selenium
Frameworks	Flask, Django, FastAPI, SQLAlchemy, Node.js, React, Vue, TensorFlow, PyTorch, OpenCV
Development Tools	Git, Figma, VSCode, Eclipse, Android Studio, Unity, Postman, Insomnia
DevOps	Amazon Web Services, Google Cloud Platform, Docker

EXPERIENCE

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

- Created a full-featured internal tool that helps IT professionals find information to assist employees and resolve tickets.
- Added functionality for DocuSign app administrators to create criteria and apply them to employees seamlessly.
- Used **Django** and **Vue**, deployed to **AWS**, added **Okta** authorization, and optimized **SQL Server** queries **(∼6x speed up)**.
- Implemented **Identity and Access Management (IAM)** protocols, enhancing user security and resource accessibility.
- Improved Mean Time To Resolve from ∼29 hours per ticket to ∼3 hours per ticket **(∼10x speed up)**.
- **Demo-ed to VP of Global IT and Chief Information Officer of DocuSign**.

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

- Led 8 people in creating an **NLP**-based product that provides company-dictated writing feedback for employees.
- Used **Attention-based Transformers**, **Deep Averaging Networks**, and Google's **PEGASUS** model to provide feedback.
- Personally developed **Flask** backend server infrastructure and optimized server runtime performance **(∼100x speed up)**.
- Maintained team performance through **Trello Boards**, **Agile Sprints**, and scheduled work and design review meetings.
- **Licensed to Uber for $240k**.

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

- Working with Prof. MacLellan and 7 graduate students on **Cognitive AI** systems, human-like **AI/ML** models.
- Adapting **COBWEB**, an incremental conceptual clustering system, for use in **language modeling**.
- Optimized prior **Python** implementation of COBWEB **(∼25x speed up)**.
- Developed **C++** implementation of COBWEB for better runtime performance **(∼100x speed up)**.
- Researching **Inverse Reinforcement Learning (IRL)** and **AI Planning** to create agents that plan and behave like humans.

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

- Developed an **iOS**-based **AR** app using **Swift** that records and sends **LiDAR** data about body movement to server.
- Aimed to improve athletic performance by comparing simulated vs. actual motion.
- Used to beta-test the desktop app prior to the Series-C funding round.

PROJECTS

Quibble Spearheaded the development of a **Data-Driven** and **LLM**-powered learning acceleration tool, providing students with user-friendly access to high-quality resources through an intuitive **UI**. (Check out our landing page!)

AnimeQ Developed an **ML**-based algorithm utilizing **PyTorch** to create and train an **Attention-based CNN Sparse-VAE** to determine the suitability of manga for anime adaptation.

Ludis Directed the creation of a sports-focused social networking site, utilizing **Flask**, **Python**, and **PostgreSQL** for backend development, fostering connections among users with shared sporting interests.

IFF Developed **NLP**-based browser extension using **Python**, **Flask**, **React** and **TensorFlow** to detect political bias in news articles with **83.4% accuracy**. Deployed on **Google Cloud Platform**. Available on the Google Web Store with a 5-star rating. Continuously enhancing its Machine Learning features and information display.

ClassNet Implemented a **Computer Vision** model using **TensorFlow** employing hierarchical classification with a tree of **CNN** classifiers, resulting in increased accuracy and reduced computation. **Achieved 98.7% accuracy on 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 Computer Science Category. *Performed Longitudinal Study on Political Bias in News-based Media.*