Pranay Agrawal

US Citizen | 859-699-2881 | pranay.agra@gmail.com | linkedin.com/in/pranayagra | github.com/pranayagra

Education

Stanford University — Stanford, CA
Master of Science in Computer Science — *Sept. 2022 – May 2024*
Concentration: Artificial Intelligence — **GPA**: 4.0/4.0

Georgia Institute of Technology — Atlanta, GA
Bachelor of Science in Computer Science — *Aug. 2019 – May 2022*
Concentration: Intelligence and Devices — **GPA**: 4.0/4.0

- **Coursework**: Design and Analysis of Algorithms (top 5%), Objects and Design, Computer Organization and Programming, Graduate Machine Learning, Graduate Deep Learning, Artificial Intelligence, Computer Vision

Experience and Research

DRW | *Software Developer Engineer Intern* — June 2022 – Aug. 2022
- Built from scratch a UDP multicast subsystem that allows any application to display messages, play sounds, and execute commands on the primary FICC trading UI with extremely low effort from the developer's perspective

Amazon | *Software Developer Engineer Intern* — May 2021 – Aug. 2021
- Implemented Datapath Precompute service to make more informed decisions on which N Alexa skills are relevant to a user's vocal request with Amazon DynamoDB and Google Guava Cache, **reducing financial cost by 70%**

NCR | *Software Engineering Intern* — May 2020 – Aug. 2020
- Integrated Apple/Google Pay WinEPTS services on a solution that allows consumers to shop using their smartphone, using framework Xamarin in .NET mobile development to **increase user retention by 20%**

Georgia Tech CCG: **CopyCat** | *Undergraduate Researcher* | *ACM-CHI 2021 Publication* — Aug. 2019 – Aug. 2022
- Developing a Computer Vision based ASL recognition framework to improve short-term memory of deaf children
- Demonstrated **HMMs outperform Transformers by 17%** for ASL recognition
- Implemented custom GMM visualization pipeline for feature selection, **improving word accuracy by 23%**

Projects

VISION | *AutoML Vision Edge, Google ARCore, Android App* — Aug. 2019 – Present
- 2nd Place at GT Idea to Prototype Showcase | Semifinalist at 2021 InVenture Prize
- Collaborating with the GT Sonification Lab to build a novel, low-cost wearable device to assist the disabled and visually impaired population with safe and efficient navigation yielding a **70% reduction in accidents**

Health Port | *React Native, TypeScript, Expo, Ignite CLI, Figma, Postman, Git* — Oct. 2020 – Aug. 2022
- 1st Place at HackGT7: NSIN Sponsored Challenge | Independent Group Project
- Collaborating with the US Army rangers to create a single interface to aggregate data from a variety of fitness-tracking devices and their respective APIs to **improve operational training efficiency by 60%**

Extracurricular

Undergraduate Teaching Assistant | *Design and Analysis of Algorithms* — Aug. 2020 – May 2022
- Designed quizzes & lecture problems/solutions twice a week along with course exams & review sessions each unit

Founding Member and President | *Programming Team* — Aug. 2018 – May 2022
- Educated 100+ students with competitive programming algorithms and topics for USACO and ACM-ICPC

Awards and Honors

MIT Battlecode (AI Programming Competition) | *Real-time strategy game* — Jan. 2023
- 3x Finalist out of 650 teams in worldwide month long competition with AI, distributed algorithms, and blockchain

Citadel Terminal Live (AI Programming Competition) | *Tower defense-style strategy game* — Oct. 2020
- 1st Place out of Georgia Tech and UT Austin teams | 13th Place out of 30,000 students in global competition

Competitive Programming Contests — Aug. 2018 – Present
- USACO Gold Division (top 10%) | 8th in 2020 Southeast USA Regional Contest | Round 2 in Google Code Jam

Technical Skills

Languages: Java, Python, C & C++, C#, JavaScript, HTML & CSS, Mathematica
Tools/Frameworks: Git, JUnit, Docker, GCP, Jira, Postman, Expo, Linux CLI, Brazil, OpenCV, TensorFlow, React