Pranay Agrawal

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

Education

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

Amazon | *Software Developer Engineer Intern* — May 2021 – Aug. 2021

- Integrated Alexa skill manifest information at service runtime to make more informed decisions on which N Alexa skills are relevant to a user's vocal request
- Implemented Datapath Precompute service with Amazon DynamoDB and Google Guava Cache to filter and store manifest data with 3 ms P99 data query latency, 15 min propagation delay, and **reduce financial cost by 70%**

NCR | *Software Engineer Intern* — May 2020 – Aug. 2020

- Worked on FastLane Mobile Shopper, a comprehensive solution that allows consumers to scan and price items as they shop using their smartphone, using framework Xamarin in .NET mobile development
- Created Apple/Google Pay WinEPTS services with decentralized connector to **increase user retention by 20%**

Georgia Tech CCG: **CopyCat** | *Undergraduate Researcher* | *ACM-CHI 2021 Publication* — Oct. 2019 – Present

- Developing a Computer Vision based ASL recognition framework to improve short-term memory of deaf children
- Demonstrated **HMMs outperform Transformers and LSTMs by 17%** for ASL recognition
- Implemented custom GMM visualization pipeline for feature selection, **improving sentence accuracy by 106%**
- Developed an adaptive model to progressively tune a base model on a new user, **improving accuracy by 8%**

Projects

Health Port | *React Native, TypeScript, Expo, Ignite CLI, Figma, Postman, Git* — Oct. 2020

- 1st Place at HackGT7: NSIN Sponsored Challenge | Independent Group Project
- Collaborated 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

VISION | *Intel RealSense Depth Camera, OpenCV, Raspberry Pi* — 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 outdoor navigation yielding a **70% reduction in accidents**

Extracurricular

Undergraduate Teaching Assistant | *Design and Analysis of Algorithms* — Aug. 2020 – Present

- Designed quizzes & lecture problems/solutions twice a week along with course exams & review sessions each unit

Executive Board Member | *Startup Exchange* | *https://startup.exchange* — Aug. 2019 – Present

- Empowered 200+ students with entrepreneurial knowledge by hosting & leading weekly events with guest speakers

Founding Member and President | *Programming Team* — Aug. 2018 – Present

- Educated 50+ 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. 2021

- 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