

## EDUCATION

---

### Dartmouth College, Hanover, NH

June 2021

GPA: 3.95 / 4.00

- **Mathematics, Computer Science, B.A.**
- **Honors:** Summa Cum Laude (**Top 5%**), Phi Beta Kappa, Rufus Choate + Presidential + Neukom Scholar
- **Relevant Coursework:** Algorithms, Software Design & Development, Full-Stack Web Development, Machine Learning, AR/VR development, Computational Linguistics, Linear Algebra, Real Analysis, Probability Theory, Statistical Modelling

## WORK EXPERIENCE

---

### Appian Corporation (Low-Code Software Enterprise)

Sep 2021 – Present

#### Software Engineer II

- Building and maintaining an internal platform to support custom machine learning model training and deployment. Delivered product in <1 year, onboarding 20+ new enterprise customers, and increasing product adoption by 12%.
- Developed scalable APIs in **Python** to support data upload, model training, and inference. Deployed our service using **Docker + Kubernetes**, and optimized it to support 120+ concurrent model training jobs, and 150+ concurrent inference jobs, each with up to 200 documents per job. Reduced inference completion time by 85% to ~3 mins per document.
- Implemented antivirus scanning, disaster recovery automations and monitoring systems to ensure SOC2 Compliance.
- Managed **AWS** cloud tools (e.g. Sagemaker, DynamoDB, S3, RDS) using **Terraform**, to enhance service functionality.

### Keystone Strategy (Strategy & Tech Consulting Firm)

Jun 2021 – Sep 2021

#### Data Science Intern

- Developed a machine learning model to predict precise repair solutions to defected home appliances using textual data.
- Pre-processed 170,000+ rows of customer service data using **numpy + pandas**, and trained a deep learning NLP model to outperform a formerly employed 3<sup>rd</sup> party software, increasing prediction accuracy from 89% to 98.6%.
- Built proprietary software codebase (~ 600 lines of **Python** code) for industry-leading repair intelligence company, increasing their enterprise value by double digits, to an estimated \$200 million.

### Harmonize (HR management SaaS company)

Jul 2020 – Sep 2020

#### Data Science Intern

- Developed a logistic regression model to forecast customer churn using **Python** and **SQL**. Devised renewal strategies for the marketing team using customer segmentation analysis. Increased retention rate by ~20% in the subsequent year.
- Automated a script using **Selenium** to scrape product reviews from review platforms, reporting 20+ bugs and defects.
- Worked with engineering team to enhance automated chatbot features, boosting product adoption by 22% in 3 months.

### JoyAether Limited (Mobile Solutions Startup)

Jul 2018 – Aug 2018

#### Software Engineer Intern

- **Citibank:** Led 2-month rapid development of a mobile-banking app prototype from scratch as a Product Owner. Liaised with client for project scoping, defined timelines + KPIs, and facilitated sprint planning and backlog grooming.
- **SnapPop:** Developed an Augmented Reality mobile shopping app, featuring reward games and 3D product modelling. C# engineering in Unity, quality assurance testing, and user research to support engineering and UX divisions.

## RESEARCH + PROJECTS

---

### NLP Research Scientist at Dartmouth Sustainable Health Labs

Jun 2020 – Jun 2021

**Research:** Understanding Public Perception and Communication around Telehealth during the COVID-19 Pandemic

- Applied **sentiment analysis** and **hetero-functional graph theory** to characterize healthcare provider and patient communication patterns in the Twitter social network. Thesis published in IEEE and INFORMS scientific journals.

### Autonomous Vehicles Research Scientist at Dartmouth Robotics Lab

Mar 2021 – Jun 2021

**Research:** Autonomous Robotics Motion Planning

- Devising an **obstacle avoidance system** for autonomous vehicles. Implemented 3D LIDAR point cloud clustering for object detection and classification, and an Extended Kalman Filter to estimate object positions based on motion models.