

PRATIM CHOWDHARY

(516)-972-4212 | cpratim18@gmail.com | github.com/cpratim | cpratim.github.io

EDUCATION

Dartmouth College

Hanover, NH

B.A in Computer Science and Mathematics; **GPA: 3.8/4.0**

Sep 2021 – June 2025

- **Relevant coursework:** Randomized Algorithms, Deep Learning Robustness, Combinatorics, Honors Probability Theory, Applied Cryptography, Software Design and Implementation, Machine Learning and Statistical Analysis, Compilers, Object Oriented Programming, Algorithms Design and Analysis

SKILLS

Languages: Python, C++, Java, C, Bash

Skills: Competitive Programming, Algorithm Design, Data Processing, Machine Learning, Analytical Problem Solving, Multithreading / Concurrency, Linux, AWS (EC2, Lambda, S3, SQS), PyTorch, Numpy, Pandas

PROFESSIONAL EXPERIENCE

Susquehanna International Group

Philadelphia, PA

Software Engineer Intern

June 2023 – Aug 2023

- Incoming developer intern on the Strategy Innovation Team, using Python and C# to implement trading strategy

DSAIL Machine Learning Lab

Hanover, NH

Undergraduate Research Assistant

Jan 2023 – Present

- Currently working under Prof. Vosoughi on analyzing implicit bias in the training of Large Language Models
- Built stereotype intensity model using BERT / PyTorch fine tuned on the Stereo-Set and used it to analyze the stereotypicality of GPT2 generations on select prompts treated with sentiment flipping and negation

TakeOut7 Integrated Ordering

Hartford, CT

Software Engineer Intern

June 2022 – Aug 2022

- Built an application to automate deployment of static websites for restaurants on AWS, using lambdas to register domains, load media content into S3 buckets, secure SSL certificates and deploy CDN on CloudFront
- Eliminated manual tasks and reduced the time to deploy customized websites from over a 10 hours to less than 30 minutes, saving thousands in marketing costs for 100+ restaurants in the Hartford, CT area

DALI Technical Lab

Hanover, NH

Lead Software Engineer

Mar 2022 – Nov 2022

- Led backend development in a team of 7 for two 10-week production cycles, eventually deploying an application used by emergency room residents to aid in patient diagnosis at the Dartmouth Hitchcock Medical Center
- Developed backend using Flask to build API routes with MongoDB database integration for low latency object storage and JWT tokens for secure request handling deployed on the Heroku Cloud

Advantage Capital

Hanover, NH

Software Engineer Consultant

Jan 2022 – Mar 2022

- Contracted by Advantage Capital to research and build auto-regressive models (SVM, RandomForst, SGD) to forecast loan default rate on a dataset of 500,000+ loans, eventually shipping model with 91% overall accuracy

SELECTED PROJECTS

Project Euler (C++ & Python) | Solved Collection of Challenging Mathematical / Computational Problems

- Used dynamic programming, graph theory, linear algebra, probability theory, linear algebra etc to solve 50+ computational mathematics problems with highest difficulty problems having under 5000 accepted solutions

BART Data Challenge (Python & Statistical Analysis) | Citadel Northeast Datathon 2023

- Participated in competition with under 100 accepted students and conducted novel research on using data-driven graph optimization algorithms to reduce congestion and fares by up to 10% among BART train lines

EXTRACURRICULARS

Undergraduate Teaching Assistant — COSC-31: Algorithms Design and Analysis

Mar 2023 - Present