

DIVYA VENKAT

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EDUCATION

Northeastern University (Dean's List, Connections Scholarship) May 2022
Bachelors in Computer Engineering and Computer Science **Major GPA: 3.81**

SKILLS

C++, Python, SQL, Java, Javascript + Typescript, Linux kernel programming, Git, Docker, Kubernetes, Terraform, SQLite, RStudio, MongoDB, programming FPGA using Xilinx tools, basic encryption/decryption and attacks, MATLAB, Stata, CAD, functional programming (Scheme, Rust), Verilog, Microsoft Suite + VBA

PROJECTS

Food Nutrition Analysis/Meal Planner Software

Pulled data from USDA databases to create a software using SQL + Python that computes the full nutritional content of any individual recipe, finds if a diet is deficient in any given nutrient, and gives exact recommendations for supplementation.

T.R.A.S.H Bot

Wrote research proposal for, designed, and created an autonomous UAV + UGV pair to detect, efficiently seek out, and collect roadside litter – a more cost efficient and reliable solution to a billion dollar problem. Won first place among thirty teams in Capstone Competition.

Circuit Toolkit

Created a fully autonomous python script capable of fully analyzing any given circuit (AC and DC)

LANGUAGES

Fluent English, Intermediate Hindi, Fluent Tamil, Intermediate Spanish, Beginner French, Beginner Japanese

EXAMS

SAT 1560/1600

TECHNICAL EXPERIENCE

Software Developer at Moody's Analytics

6/2022 – present

Backend development of modeling software AXIS, primarily in C++.

Independent research + programming of new financial modeling features for clients.

Database Development Intern at Global Atlantic Financial Group

6/2021 – 9/2021

Initiated extensive restructuring in large data sets to increase efficiency

Automated calculations and report generation, saving 5+ hours a week

Created capacity models, metric reports, and balancing reports

Software Engineering Intern at GetACab Inc.

5/2019 – 9/2019

Used geohash encoding to efficiently store lists of positional coordinates

Periodically archived positional data updates for analysis.

Modified citymap geometrical analysis algorithm to save 16 ms on every transaction.

Wrote python scripts to migrate the data from app's servers to client servers.

Research Assistant for Kaushik Chaudhury, Ph.D.

9/2018 – 3/2019

Worked on the positioning system for UAV-mounted software

radios for an Air Force funded project to create an optimized 5G network.

Wrote global positioning scripts in Python and translated code

meant to run on CPU for GPU using CUDA toolkit

EXTRACURRICULAR/VOLUNTEER EXPERIENCE

Associate at EduRaise

7/2019 – 9/2021

Raised over \$5000 in donations to reduce tuition by

25% for underprivileged students. Designed online grassroots fundraising campaign.

SAT Coach at Kaplan Test Prep Inc.

3/2019 – 9/2021

Individually tutored prospective SAT takers (part-time).

Research Assistant for Dr. Iris Malone, Ph.D. at Stanford University

9/2016 – 3/2017

Freelance Writer and Artist

published in *Canvas Literary Journal*, *Mindframes Magazine*,

Celebrating Art Anthology, *Polyphony H.S Magazine*

Editor for Polyphony H.S. International Magazine

10/2016 – 5/2018