Vaishnavi Gupta

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github | linkedin

EDUCATION

Cornell University - *BS (Computer Science)*
August 2019 - May 2023

GPA - 3.77

DPS International, New Delhi, India
March 2013 - April 2019

Graduated with 4A*s in Physics, Chemistry, Mathematics and Further Mathematics under the A-Level curriculum, and a 5 in AP Biology

EXPERIENCE

All India Institute of Medical Sciences, Delhi, India —
Developer and intern

January 2018 - June 2019

Built an **online learning platform** from scratch to train medical students and doctors on optimal neonatal care practices; PHP and MySQL used for backend

Nationwide scale-up, with **3000+ users** from India and the Maldives

Institute of Genomics and Integrative Biology, Delhi, India — *Research intern*

March 2018 - June 2018

Implemented machine learning models using various classifiers (Naive Bayes, Random Forest) to predict chemical reactivity of untested molecules

Algorithm helps screen molecules for tuberculosis drug discovery programmes

PROJECTS

Phylo - https://github.com/FelixHohne/phylo-lib

A phylogenetic tree library in OCaml to parse DNA sequence files and generate most-likely phylogenetic trees using various distance measure and maximum likelihood based algorithms. Also implemented a parser for PhyloXML files to read in existing phylogenetic tree data.

Critterworld

A 10000 line+ Java game consisting of a world of programmable 'critters'. In the process, I wrote a server and implemented thread-safety to support multiple players, and wrote a parser to read in critter files.

ABOUT

Having worked in fields like bioinformatics and public health, I'm passionate about applying my knowledge to other CS fields to make an impact.

UNDERGRADUATE COURSEWORK

Honors OOP and Data Structures
Multivariable Calculus
Visual Imaging
Functional Programming*
Honors Discrete Mathematics*
Differential Equations*
Intro to Machine Learning*

* In progress

AWARDS

Dean's List: Fall 2019

ACM-ICPC for Schools Contest: 2nd place in the India ICPC qualifiers amongst 100 high school teams

3-time Indian National Olympiad in Informatics Finalist: Amongst the top 60 students in the country

AIME qualifier

SKILLS AND TECHNOLOGIES

Software Design + Data Science

Significant experience in **Java**, **Python** (including numpy and matplotlib), **C++** and **R** through class and personal projects

Web Development

Frontend and backend experience using **PHP, MySQL, Javascript (React, Node.js), HTML5** & **CSS**

Graphic Design

Adobe Illustrator and **InDesign**