VIKRAM SINGH

University of Pennsylvania

@ singhvik@sas.upenn.edu   ● Hong Kong   in vikram-singh-2002   ○ vsingh18567

Sophomore studying Computer Science. Looking for internship opportunities in Software Engineering.

EXPERIENCE

Summer Researcher
UPenn Department of Computer Science

📅 Jun 2021 – Aug 2021   📍 Philadelphia, PA

- Working with the DeepSpec project and Prof. Weirich. Using the Coq Proof Assistant to verify the Haskell IntMap data structure.

Backend Developer
Penn Labs ○   🌐

📅 Feb 2021 –   📍 Philadelphia, PA

- Create software used by thousands of faculty and students at the University of Pennsylvania.
- Work on the Platform team, integrating all of PennLabs' products into one system.

Data Scientist
Wharton Analytics Fellows

📅 Sep 2020 – Nov 2020   📍 Remote

- Worked with SaaS Healthcare company with the aim of reducing customer churn. Used machine learning techniques to create a churn prediction model and identify key indicators of churn.
- Independently built Flask API to productionize model & presented findings to company.

PROJECTS

FM Analytics ○   🌐   `Python` `Django` `Web Dev`

- Web-app that allows players of the Football Manager (FM) video-game series to upload their game data and have it stored and analysed. Deployed on Heroku

pgnsplit ○   🌐   `Python` `CLI` `File IO`

- Python package that converts a single Chess PGN file into a folder of PGN files, each containing an individual variation of the original file. Used for opening study. Published on PyPI.

Minesweeper ○   `Java` `Swing`

- Implementation of the traditional Minesweeper game using the Java Swing GUI library. Implements the Model-View-Controller GUI structure, File I/O and the recursive flood-fill algorithm.

Coronavirus Tracker ○   `Python` `Web Scraping`

- Script that scrapes Worldometer's Coronavirus data everyday and sends an e-mail with an update.

SKILLS

`Python` `Data Analysis` `Pandas` `Django`
`Numpy` `Scikit-learn` `Java` `Swing`
`JavaScript` `LaTeX` `OCaml` `Git`

`Leadership` `Public Speaking / Debate`
`Adaptability` `Commitment` `Integrity`

EDUCATION

Bachelor of Science in Engineering
University of Pennsylvania

📅 2020 –   GPA: 3.9/4.0

- Majoring in Computer Science
- Relevant Coursework:

`Programming Techniques` `Data Structures & Algos`
`Hon. Calculus II-III` `Maths of Computer Science`

IB Diploma
German Swiss International School, HK

📅 2011 – 2020   43/45

- Higher-Level subjects: Mathematics, Economics, Physics
- ACT: 36/36

ACTIVITIES

- Deputy Vice-President, Undergraduate Statistics Society
- Head Student and Head of Student Council, German Swiss International School
- Semi-finalist or better at six debate tournaments across Asia, Top 10 speaker at five tournaments.
- High-school Varsity Tennis Team Captain, Top 50 ranked junior in Hong Kong

HOBBIES

- Rock music
- Chess
- Soccer & Tennis