# **Abhay Singh**

contact

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education

Cornell University, Ithaca, NY

B.S. Computer Science

Aug 2018 – present

experience

## Software Engineer Intern, Android

June 2017 – June 2017

Damco Solutions Inc. - damcogroup.com

Deployed Android application PhotoShelf (photoshelf.in) in development team of 4

- Implemented UI using Android Studio and XML in preparation of launch
- Employed object-oriented programming (OOP) fundamentals in Java
- Sped up workflow by 1 week by designing wireframes that allowed concurrent implementation of logic and UI design
- Consulted higher management and collaborated with the CEO & Managing Director to streamline the app's UX design and flow

## Instructor & Curriculum Developer

July 2017 - Oct 2017, June 2018 - present

Data Science for India – datascienceforindia.com

Developed curriculum of 11 interactive-programming Jupyter notebooks, 12 statistics-based worksheets, and 1 final project, which was taught to over 400 students across India

- Instructed course in-person to 38 students, beginning with fundamentals of Python and statistics
- Extensively used numpy, pandas, and matplotlib to visualize, manipulate, and discern useful data from large data sets

projects

## Space Invaders •

built using Python, Kivy

- Fully-functioning implementation of the retro arcade game Space Invaders with Model-View-Controller (MVC) and State design patterns
- Thoroughly utilizes OOP fundamentals of data abstraction, encapsulation, and inheritance

## Virtual Stock Market (7)

built using Flask, Python, SQLite, JavaScript, HTML, CSS

- RESTful web app that gives users \$10,000 of paper money and scrapes/parses live stock prices as JSON objects, storing them as purchases and sales of a given user in a database
- Allows users to: sign-up, login, change password, quote live stock prices, buy and sell stocks at live prices, view index of owned stocks with total live value, & view trade history

#### Spellchecker (7)

built using C

- Checks inputted text file for misspellings against a changeable dictionary and prints out all misspelled words in a command-line interface (CLI)
- Stores every word of entire English dictionary in a self-implemented hash table, using low-level memory management with pointer references, malloc(), and free()

# Reddit Playlist

built using Java, XML, Android Studio

- Android app that converts user-selected subreddits into objects for conversion into live YouTube playlists to watch or listen
- Retrieves video posts using a subreddit's RSS feed and YouTube's API to format into a ListView

# JPEG Recovery ?

built using C

• CLI application that recovers JPEG files from formatted memory cards (.raw files)

#### Tweet Sentiment Analyzer ?

built using Flask, Python, HTML, CSS

• Takes an inputted Twitter username and scores user's tweets as positive, neutral, or negative

#### Puzzle of Fifteen (7)

built using C

• Plays the puzzle of fifteen game (en.wikipedia.org/wiki/15\_puzzle) in a CLI

Python, Java, HTML, CSS, JavaScript, C, Git, Flask, Bash/Shell, LATEX