Josh Lin

Portfolio: https://linynjosh.github.io/

EDUCATION

UNIVERSITY OF BRITISH COLUMBIA

BSc in Computer Science
Sept 2020 — May 2024 |
Vancouver, Canada

LINKS + INFO

https://linynjosh.github.io/
linynjosh@gmail.com
linynjosh
Josh Lin

SKILLS

PROGRAMMING

Python • Java • LaTeX
• HTML • CSS • C++ • C

TOOLS

Git • Jupyter Notebook
Plotly • pandas • Heroku

INTERESTS

PROGRAMMING

Data visualization• Data analysis
Web design

EXTRACURRICULAR

Basketball • Violin

COURSEWORK

COMPUTER SCIENCE

Computation, Programs,
and Programming *(Challenged with 100%)*
Models of Computation
Software Construction
Basic Algorithms and Data Structures
Introduction to Computer Systems
Introduction to Software Engineering
Intermediate Algorithm Design
and Analysis

MATHEMATICS

Differential Calculus
Integral Calculus
Matrix Algebra
Linear Systems

WORK EXPERIENCE

UNDERGRAD COMPUTER LAB IT ASSISTANT

Summer 2021 • UBC Faculty of Forestry

- Worked for the Faculty of Forestry to install PC hardware/software while running hardware diagnostics to evaluate hardware health.
- Learned general Knowledge of Active Directory, Group Policy Objects and Preferences in addition to basic understanding of TCP/IP and VLAN networks.

PROJECTS

TODO-APPLICATION

Jan – May 2021 • code link

A planner app that manages different tasks by categorizing them according to their corresponding due dates or tags.

- Included functionalities to add, remove, and view tasks and reminders.
- Called APIs to read in daily weather and news data from **openweathermap.org** and **newsapi.org** according to the user's scanner input.
- Parsed weather and news data stored in JSON files with the JSON.simple library in Java.
- Added data persistence to save and load todo list from file.

CRIME AND DEMOGRAPHICS: NYC

May – Jun 2020 • web app link

A web app visualizing the demographics of 5+ million crimes in New York City.

- Filtered dataset based on the offender's race, gender, age, offense, crime location, and date using Python and pandas.
- Implemented the KMeans clustering algorithm in Scikit-learn to categorize crimes by regions and differentiate districts with high crime density.
- Created interactive graphs with Plotly visualizing the frequency of crimes as a function of the variables above.
- Built web app using streamlit and deployed with Heroku.
- **Utilized**: pandas, Plotly, streamlit, Heroku, Scikit-learn

EARTHQUAKE EFFECTS

Apr – May 2020 • website link

A website visualizing the effects of major international earthquakes since 1993.

- Utilized Python and pandas to clean dataset and extract entries containing earthquake location, year, magnitude, depth and damage caused.
- Designed a central web page using HTML and CSS with links to Kepler.GL visualizations of extracted parameters. Hosted with github pages.
- **Utilized**: Jupyter Notebook, pandas, HTML, CSS, Kepler.GL, github pages

THE SATELLITES RACE: ROUND 1

Mar – Apr 2020 • web app link

A web app visualizing the increase in number of satellites launched since 1975.

- Used Python and pandas to categorize each satellite by its purpose – military, civil, commercial, and government, and by its country of ownership.
- Built visualization dashboard displaying interactive graphs with Plotly and Dash. Deployed with Heroku.
- **Utilized**: Plotly, Jupyter Notebook, Dash, Heroku