VANDAM DINH

Email: v.dinh.2021@bristol.ac.uk

Phone: +44 7480 133934

LinkedIn.com/in/vandamd GitHub.com/vandamd

EDUCATION

University of Bristol

Engineering Mathematics, MEng

First Year: 72% (First class)

Relevant Modules: Engineering Mathematics, Mathematical and Data Modelling, Computer Programming, Discrete Mathematics, Engineering Science, Signals and Systems, C for Embedded Systems, Introduction to Data Science

Merchant Taylors' Boys' School, Crosby, Liverpool

2009 - 2021

2021 - Present

A-Levels: Further Mathematics, Mathematics, Design & Technology, Physics - A*A*A*A

GCSEs: 9A*s. 2As

RELEVANT PROJECTS

COVID-19 Data Visualisation, Project Leader

March 2022 - May 2022

(GitHub Link)

- Coordinated the development of an interactive site displaying COVID-19 metrics of the UK with Python, Plotly and Dash.
- Designed the site using FigJam, encouraging collaboration to formulate new ideas from other team members.
- Implemented callback functions for cities and time range so plots automatically update based on user input.

Modelling the growth of Douglas Fir, Project Leader

March 2022 - May 2022

(GitHub Link)

- Developed differential equations that related the change in a tree's height with its metabolism, and iterated to increase
- Established the report's structure and distributed parts to team members using Google Docs.
- Oversaw and assisted with merging research and development with figures generated from Maple to create a cohesive report in LaTeX.

Optimising the connections of Telecommunication Networks, Project Leader

January 2022 - March 2022

(GitHub Link)

- Compiled algorithms that found the minimum spanning tree of a network, applied it to a real-world scenario and determined the most suitable method.
- Worked on explaining the algorithms, drawing figures with Inkscape and developing a Python function that generated a weighted graph given the coordinates of nodes using NetworkX.
- Assessed and processed the works of others from Google Docs into Overleaf.

Caesar Cipher Python Program

November 2021 - December 2021

(GitHub Link)

Wrote a TUI (Text-based user interface) program to encrypt or decrypt a message by giving a specified shift value and decrypt a message through a comparison of a word bank.

Home Media Server June 2022 - September 2022

- Converted an old computer into a home server, installed Ubuntu and deployed media-centric applications via Portainer in Docker.
- Implemented remote access with Nginx and Duck DNS, allowing for hi-res audio files to be streamed.

WORK EXPERIENCE

General Assistant, Charlie Chans Takeaway, Liverpool

May 2017 - September 2019

- Organised and prepared ingredients for the chef and arranged inventory for uninterrupted service.
- Provided exceptional service that contributed to several 5-star reviews on Google.
- Connected with staff members to create a fun and positive working environment.

Volunteer, Crosby Library, Liverpool

May 2017 - August 2017

- Familiarised, maintained and organised a large catalogue of books.
- Inspected computers and provided help to the public and staff members with technical support.

SKILLS AND INTERESTS

Programming: Python, LaTeX, HTML, macOS, Linux

Python Libraries: Pandas, Plotly, Dash, Matplotlib, NetworkX, SymPy

Tools: Git, Docker, Heroku, Overleaf, Anaconda, Jupyter, Maple, MATLAB, Inkscape, Obsidian, Notion, Microsoft Office

Hobbies: Wild camping, Photography, Guitar, Mechanical Keyboards, Music Production