

David Nwachukwu
dcndaviddcn@gmail.com
<https://dcndavid.github.io/>
07957604960

Profile

Detail-oriented programmer with a strong passion for software development. Seeking to leverage my skills in collaboration, communication, and development as an employee to gain experience within the workforce.

Education

UNIVERSITY OF SURREY

Sept 2022 - July 2026

Course

- *Computer Science BSc (Hons)*

THE BRIDGE ACADEMY

Sept 2015 - July 2022

A Levels, 2022

- *Computer Science - A / Maths - B / Physics - C*

Achievements

- *Developed and published multiple mobile apps on the Google Play Store, programmed using C# whilst utilizing the Unity game engine, and integrating APIs for enhanced functionality.*
- *Collaborated with prestigious brands, including Nike, Tottenham Textiles, HeyBigMan, and Aitch Group, to design The Hackney Wick FC football kit using Photoshop, showcasing meticulous attention to detail and honing my graphical design skills.*
- *Participating in the cisco little big awards where I led a group as we developed new conceptual computer systems, which we presented to a group of academics. I led the development of a postal service using underground pipelines. Focusing on pathfinding, we utilised a Dijkstra algorithm, incorporated with agent-based modelling, to simulate the most optimal pathways to deliver posts. Through my participation, I was able to develop a comprehensive understanding of the use of pathfinding algorithms within AI, as well as handling large datasets and processing instructions in parallel.*

HARVARD UNIVERSITY

Aug 2020 - Dec 2020

Graduated Class of 2020 Online Classes

- *Completed prestigious Harvard CS50 Introduction to Computer Science course.*
- *Gained a comprehensive grasp of computer science and programming.*
- *Learned to think algorithmically and efficiently, tackling complex programming challenges.*
- *Developed practical skills in C, Python, and SQL programming languages.*
- *Acquired proficiency in key concepts: algorithms, data structures, abstraction, encapsulation, and modularity.*
- *Studied web development, including HTML, CSS, and JavaScript.*
- *Executed impressive projects, including a real-time web-based finance tracker.*
- *Demonstrated expertise in database design, server-side programming, and front-end development through the finance tracker project.*
- *Displayed commitment to continuous learning and staying current with industry trends.*

Employment History Or Work Experience

Rightmove Real Estate Property Data Analysis Project

Jul 2023

DATA ANALYST / SOFTWARE ENGINEER

- *Leveraged Python's web scraping capabilities (Requests and BeautifulSoup) to collect property data from Rightmove, creating custom scripts to automate data extraction.*
- *Conducted data cleaning and preprocessing using Python's Pandas library to ensure data integrity and consistency, facilitating in-depth exploratory data analysis.*
- *Unveiled market trends, discerned patterns, and identified investment opportunities in the real estate landscape through EDA, visualizations, and interactive dashboards in Tableau.*
- *Engineered features, including "Listing Age," "Description Length," and "ID," to enrich the dataset and provide valuable insights for investment recommendations.*
- *Applied problem-solving skills to tackle complex data challenges, translating findings into actionable insights for stakeholders.*

The Wickers Charity

Aug 2019 - Present

SOFTWARE ENGINEER-TEACHER

- *Designed and delivered comprehensive programming courses for young participants, covering Python's object-oriented programming, class inheritance, encapsulation, and polymorphism.*
- *Guided students in understanding data structures and algorithms, laying the groundwork for writing efficient and optimized code.*

- *Instructed participants in web development, teaching HTML, CSS, and JavaScript to create fully functional websites from scratch.*
- *Facilitated game development workshops using the Unity game engine, imparting game design principles, mechanics, and C# scripting skills.*
- *Mentored students in implementing binary and linear search algorithms in Python, fostering problem-solving abilities in computer science.*
- *Communicated complex technical concepts in an accessible manner, showcasing a passion for programming and dedication to teaching the next generation of programmers.*

Plexal City

Mar 2019

GRAPHIC DESIGNER / PROGRAMMER

Geve VR:

- *Developed a prototype VR application using Unity and C#, providing users with an immersive experience.*
- *Designed the user interface and created 3D models using Blender and Maya, enhancing the application's visual appeal.*
- *Overcame technical challenges, such as realistic physics-based interactions and application performance optimization.*
- *Collaborated effectively with developers and designers, contributing to a successful team project.*

Valkyrie Industries:

- *Designed the user interface and created 3D models, employing Adobe Creative Suite and Sketch for graphic design.*
- *Developed a user-friendly and responsive interface using JavaScript, allowing users to interact with the product.*
- *Incorporated user experience (UX) and user interface (UI) design principles to enhance the product's functionality.*
- *Gathered and integrated user feedback, resulting in a functional and user-friendly final product.*

UCL Robotics:

- *Contributed to the development of a robotic arm, writing control code in C++ and Python.*
- *Utilized SolidWorks and AutoCAD to design and simulate 3D models for the robotic arm.*
- *Collaborated with mechanical engineers and electrical engineers to ensure seamless integration of software and hardware.*
- *Gained insights into mechanical engineering concepts and their application in robotics.*

Additive Flow:

- *Developed a software tool to optimize 3D printing processes, employing Python, NumPy, and Pandas for data analysis.*
- *Implemented optimization algorithms, including genetic algorithms and simulated annealing, to find the optimal solution.*
- *Designed an intuitive user interface using JavaScript and React to facilitate user interaction.*
- *Analyzed large datasets, including material properties and design parameters, to improve 3D printing outcomes.*

Idea East:

- *Contributed to the development of a new mobile app using Swift and Java, integrating push notifications and in-app purchases.*
- *Collaborated with the UI/UX designer to create visually appealing app elements using Adobe Photoshop and Sketch.*
- *Ensured app performance and responsiveness through code optimization and network programming.*
- *Tested the app on multiple devices and operating systems to ensure compatibility and functionality.*

Key Skills

- *Programming Languages: Python, C, C++, C#*
- *Web Development: HTML, CSS, JavaScript*
- *Data Analysis: Pandas, NumPy, SQL, Tableau*
- *Graphic Design: Adobe Creative Suite, Sketch*
- *Collaboration and Teamwork*
- *Problem-Solving and Analytical Thinking*
- *Strong Communication and Teaching Skills*
- *Adaptability and Continuous Learning*

Hobbies And Interests

- *Passionate traveller, exploring diverse cultures and gaining insights that inspire creative problem-solving in software development.*
- *Enjoy boating for relaxation and rejuvenation, fostering a calm and focused mindset that enhances problem-solving abilities.*
- *Thrilled by game development, leveraging a passion for interactive experiences to create engaging and user-centric software solutions.*
- *Enthusiastic about drawing, a creative outlet that nurtures innovative thinking and visualization skills for software projects.*