Joyal John
Computer Scientist

Tel: +44 7514377414
Email: JoyalJohn3500@gmail.com

Professional   Skills

Languages (fluent):	Python, Java, Bash, Rust
Languages (basic):	PHP, JavaScript, LaTeX
Markup/Stylesheet/Query Languages:	SQL, HTML, CSS, Cypher, XML
Cloud & Deployment:	Docker, GitHub
Frameworks:	Tensorflow, Sci-kit Learn
IDEs:	VSCode, Android Studio, Jupyter Notebook, MATLAB
OS:	Windows, Linux
Version control:	Git

Summary

As a Computer Science graduate from University of Northampton, I have developed strong technical skills and a solid understanding of programming concepts and principles. Some of my key skills and achievements that demonstrate my attitude and quick-learning include:

Strong proficiency in multiple programming languages, including Java, Python, Rust and Bash. Strong problem-solving and analytical skills, with a track record of developing creative solutions to complex technical challenges.

Excellent communication and teamwork skills, with experience collaborating with cross-functional teams to develop and deliver high-quality software.

During my studies, I have completed relevant coursework and projects that have honed my skills and provided me with valuable hands-on experience. I am also passionate about technology and committed to continuous learning and professional development.

All my above mentioned skills, are transferable as I look forward into working in fast paced jobs that requires strong social skills, management, and an eager drive to learn and improve, of which I believe is a personal strength to help benefit your company.

Projects

Companies House API Interface, (Rust) [April 2023 - May 2024]
Developed my first Rust program with another developer; a simple API interface for the Companies House API, designed for educational purposes. This project demonstrates the process of building a command-line application in Rust to interact with external APIs. The code is heavily commented to serve as a learning tool, emphasizing various programming concepts and

practices.

Object-Detection and Tracking Software for Traffic in Python, (Python, Visual Studio Code Interactive Python Notebook) [December 2023 - February 2024]

In developing this speed camera program in Python, I integrated various libraries and modules to accomplish several tasks efficiently. Firstly, I leveraged OpenCV for video capture, frame manipulation, and optical flow analysis to estimate object speed. The program utilises Tkinter for creating a user-friendly interface, allowing users to either upload a video file or access a live camera feed. I incorporated the cvlib library for object detection, enabling the identification of vehicles within the video frames. Additionally, I employed file handling techniques to save captured frames containing speeding vehicles. To enhance user experience, I implemented features such as real-time display of video feed with annotated bounding boxes around detected objects. This project demonstrates proficiency in Python programming, knowledge of computer vision techniques, familiarity with GUI development using Tkinter, and effective utilisation of third-party libraries for task-specific functionalities.

E-Commerce Website Software Engineering Group Project, (PHP, SQL, JavaSript, Markup Languages) [February 2023 - May 2023]

"ClotheLine", our collaborative endeavor of a mock clothing based apparel branch, is a fully functional e-commerce website modeled after the successful Amazon platform. Developed over the course of three months by me and three other software engineering students, this project utilized PHP and MySQL Workbench on the backend, Docker for containerization, and HTML, JavaScript, and CSS for the frontend. We adhered to the Waterfall Software Engineering Lifecycle, employing Gantt charts for efficient task allocation and time management. GitHub facilitated seamless version control, allowing us to work on separate branches and maintain code integrity. Our project was marked by thorough research and extensive mockup testing, ensuring a user-friendly interface and robust functionality. Stakeholder interviews guided our design choices, and our commitment to mutual support saw team members covering for one another when needed. A comprehensive backup strategy, combining physical storage and online backups, safeguarded data integrity. Our ClotheLine project showcases our expertise in software engineering, project management, communication, and adaptability.

E-Commerce Mobile Application, (Java, Android Studio) [April 2023 - May 2023]

Developed a sophisticated e-commerce Android app using Java within Android Studio, designing a visually stunning and responsive user interface as well as ensuring multi-lingual support for global accessibility. This app's scalability, aesthetics and functionality, set the stage for a seamless shopping experience.

Shell Scripting Assignment, (Bash, Linux OS, Area of Rectangle Program and Blackjack Program) [December 2022 - January 2023]

There were three different sub assignments, the first is a mock Payroll Program that makes use of certain business tasks to calculate bonuses and total net amount. Second is an Area of a Rectangle program involved in inputting two measurements with a choice of either centimetres or inches, and calculating the correct answer of the area in whatever measurement you choose fit. Last but not least, a Blackjack game was also made, which involved scripting inputs to allow users to hit or stay, and be up against the computer with a live betting system.

Work   Experience

Application Development with Jacob P Wilson, (Data Scientist at PPX Consulting) [July 2022 - September 2022]

- My work for Jacob involved in the front-end creation of an admin portal login system for a time tracker, with use of HTML, CSS and JavaScript.

- Gained many valuable lessons in independent work such as communicating with clients to ascertain business requirements, working using Agile methodologies, as well as working collaboratively under a deadline.
- sample deployed in this URL: https://j0yalj0hn.github.io/Front-end-Login-Template/
- code link: https://github.com/J0YALJ0HN/Front-end-Login-Template

Other Work Experience

- (pre-2022) General work around multiple warehouses of DPD and The Co-operative as a picker packer whilst maintaining the warehouse; given me a lot of transferable and valuable communication skills, with a strong work ethic in addition.
- SilverStone F1 2023 - worked as a bar runner, back of house assistant, as well as kitchen porter for the restaurant and lounges in SilverStone as part of the Do&Co team.

Education

2021-2024	**B.Sc. Computing**
	University of Northampton - *Expected 2:1*
2019-2021	**A-levels**
	Computer Science, Accounting, Photography
	Loughborough College - *Grades: BBC*
2013-2018	**GCSEs (9-1)**
	English Martyrs Secondary - 11 GCSEs *Grades 8-5 (A*-C)*
	(including Maths, English, Biology, Chemistry, Physics)

Personal   skills

- Side-Projects included on my Github: https://github.com/J0YALJ0HN

References

Jacob P Wilson **Data Scientist at PPXFinancialConsulting**
Tel: +44 7510 385 493 |Email: jacob@ppxconsulting.co.uk

Dr Mark Johnson BSc, Cert Ed, PhD, FHEA. **BSc Software Engineering Degree Course Leader** |Email: mark.johnson@northampton.ac.uk |Faculty: Faculty of Arts, Science & Technology (FAST). |Address: University of Northampton, Waterside Campus, University Drive, Northampton NN1 5PH, United Kingdom