Oliver Hughes

07728246199
oliverphughes@gmail.com
Full driving licence with own car

Driven Software Developer with proven skills in Java / OOP recently graduated with a 1st in Computer Science from University of Surrey

Experience of working for a Fintech start-up in Singapore using Python and Java to deliver a Retirement calculator for their Robo advisory services, alongside website testing for a major global bank

Passionate to utilize my skills, grow and learn in a high performing team environment

Key Skills

Strong OOP skills	**C++**	**Agile Development – Jira**
Java	**Docker**	**Development in Linux, MacOS,**
Python	**Version Control – Git**	**Windows**

Experience

2018   Internship at Bambu Singapore (bambu.co)

Bambu is a robo-advisor solution provider offering financial and consumer brands the ability to integrate and benefit from the ongoing digital transformation in wealth management. Bambu has been recognised as one of the leading wealthtech companies in Asia in 2019.

I performed an internship at Bambu where I was tasked to create a retirement calculator and assisted with the development of a website for one of the world's largest global banks.

Key responsibilities
- Develop the functionality of a retirement calculator that could determine target savings for someone's retirement, depending on their intended retirement age, and income required.
- The calculator used data from an API regarding living costs across different countries based on varying levels of spending specialised to the user's desired lifestyle.
- The algorithms to develop required the use of mixed integer linear programming in order to maximise the user's retirement lifestyle within their retirement goal.

Key achievements
- Successfully delivered a fully working and documented prototype of the calculator.
- Identification and documentation of numerous issues in the testing of the bank's website.
- Integrated with the Bambu team, including leading one of the weekly teambuilding sessions.

Excerpt from reference: **"*As a growing B2B software company we need bright, innovative and committed people to build our products and our team. Oliver is all that and more. He also has a genuine feel for development and engineering.*"** Ned Phillips, Founder and CEO.

Education and qualifications

2018 - 2021 University of Surrey – BSc Computer Science – 1st Class Honours

Group projects this year have provided experience with remote collaboration and organisation, as well as significantly more individual problem solving and learning.

Final Year (Achieved a high 1st)
- Dissertation on Generative Adversarial Networks to perform instrument to instrument transformation on audio samples using Spectrograms and Image processing techniques.
- TensorFlow and Keras based U-Net convolutional neural network to perform road segmentation from satellite imagery.
- Natural Language Processing project classifying academic documents by their abstracts. A mix of traditional and machine learning based techniques and a CI/CD pipeline for updating deployed models.

Second Year (Achieved a high 2:1)
- Group Software Engineering project – AI Helpline chatbot.
  - Individually responsible for custom Python API providing NLP on users' requests.
  - Experience deploying multiple backends & frontend to DigitalOcean servers.
  - Leading and motivating team members to work remotely using Jira and Github to plan and collaborate.
- Parallel Computation and Optimisation on GPUs with C++ / CUDA.
- Further Java, C++ and Haskell based modules.

First Year (Achieved a high 2:1)
- A solid foundation in mathematics, Object Oriented Programming with Java, Ruby on Rails for web development and Arduino Assembly.

2013 – 2018 Marlborough College, Malaysia - International Baccalaureate Diploma (Including Higher level Maths, Computer Science and Business & Management) and 10 iGCSE's.

2004 – 2013 United World College of South East Asia, Singapore

Achievements

- Initiated, planned and led a Coding club teaching Python to both pupils and teachers.
- Helped set up an 'Edclub' remotely teaching underprivileged students how to use computers.
- Developed a lighting design program for the theatre. Engaging in the entire system design life cycle.
- Won a video game development competition in Singapore.
- Won a speech giving competition, alongside performing in multiple school plays & concerts.

Interests

- Exploring new areas of computer science theory and programming, for example:
  - Python optimisation using Cython and C++.
  - 6502 CPU Emulation with C++.
  - Home website & media hosting server – docker.
  - Nintendo Game Boy games in Assembly.
  - Machine learning and genetic algorithms in Python.
  - Chrome browser extensions in JavaScript.
  - Facebook, Twitter and Discord bots in Python.
- Playing the bassoon to Grade 6 level and have performed in orchestras throughout my academic life.
- Playing Ultimate Frisbee at national level with University and Club.
- Have travelled extensively across Asia, Europe, USA and Canada.