

Technical Skills

Languages

- Proficient in Python
- Experienced in JavaScript, CSS, MATLAB, Bash, \LaTeX
- Familiar with Java, C#, Go, SCSS, Less, Mathematica

Software and Technologies

- *Web Development*: Django, Django-Oscar, Flask, Fabric, Django CMS, FeinCMS, Google Analytics
- *Server Infrastructure*: AWS, Supervisor, Apache, Nginx, Docker, Vagrant, Virtualenv, Cron
- *Data Analysis Packages*: Numpy, Pylab, Matplotlib, Origin, GNUplot, MS Excel
- *Version Control*: Git, Mercurial
- *Continuous Integration*: Gitlab CI, Travis CI, Rundeck
- *Platforms*: Linux, OSX, Windows
- *Architectures*: Scalable, Microservices, Monolithic
- *Coding Practices*: TDD, Agile, Kanban, Scrum

Experience

Software Developer (Contractor)

London

Pancentric Digital

Feb 2016 - Present

Primary full-stack developer on numerous projects engineered in Python/Django with a focus on back-end server-side logic.

- Providing support and maintenance on CMS-driven web applications with highly complex business-critical logic.
- Modernising existing codebases with an emphasis on Continuous Integration and best practices.
- Introducing new processes to streamline the delivery of projects in accordance to deadlines.
- Implementing and re-factoring existing code-bases via cutting edge technologies conducive to robustness, modularity, and productivity.
- Assessing the viability of software development and delivering completed features in accordance to agreed terms.

Software Developer

London

Global Radio

July 2015 - Jan 2016

Full-Stack developer on highly distributed software primarily engineered in Python.

- Maintained highly complex legacy centralised Content Management Systems with dissociated, dependent services.
- Negotiated and coordinated new procedures to reconcile content-driven legacy projects with modern programming ethos.
- Collaborated with a large team of developers with varied skills to scope out work packets and deliver results effectively.
- Utilised all elements of the stack including complex caching, python code and JavaScript front-end to deliver completed features.
- Provided technical assistance to both technical and non-technical users.

Software Developer

London

Tangent Snowball PLC

November 2013 - June 2015

Primary back-end developer on numerous projects engineered in Python/Django.

- Engineered projects to handle high capacities using microservice architecture and dynamic scaling.
- Extended and enhanced Django-Oscar to create dynamic bespoke e-commerce solutions conforming to the Model-Template-View framework.
- Adapted to clientele needs by rapidly deploying and integrating novel functionality through various agile development techniques.

Software Developer (Data Analytics)

London

Ubiquity Press (Open-Access Publisher)

March 2013 - November 2013

Developed and maintained an exploratory data analysis tool from which business and financial decisions were made in a fast-paced reactive environment with instant feedback from end-users. The functionality of the software included, but was not limited to the following:

- Collated data using various external APIs into a structured database.
- Performed complex data analysis using mathematical libraries such as Numpy and Matplotlib.
- Provided graphical representations of results through an interactive web interface designed for non-technical end-users and implemented using Django.
- Included a web API which provided content to a number of academic journals.

Freelance Developer

London

Private Industry

Feb 2013 - March 2013

Undertook a short project with a small company which began development using C#.

- Experimented with various ways of creating a secure connection over TCP using symmetric and asymmetric encryption.

MSci Project

Aperture Photometry Project

RHUL Physics Dept

Sept 2011 - March 2012

Created a Colour-Magnitude Diagram (CMD) for an open cluster of stars using a 12" telescope, filters (B, V and R) and a thermoelectrically-cooled camera which yielded results consistent with previous studies.

- Developed and implemented a data analysis strategy in python using Numpy and Matplotlib.
- Estimated the centres of point spread functions in the images with a bespoke star finding algorithm.
- Performed background subtractions for individual stars and applied Poisson statistics in matched two dimensional arrays.

Nanofabrication Lab Assistant

SNS Junction Investigation

Royal Holloway

July 2011 - August 2011

Produced and tested samples with Superconductive Normal Metal Superconductive (SNS) junctions.

- Operated high specification equipment (Scanning Electron Microscopes, Optical Microscopes and cryogenic equipment i.e. ^3He dilution refrigerators).
- Produced nanostructures using electron beam lithography and thin film deposition within clean room facilities.

Education

Astrophysics MSci

Royal Holloway University of London

Egham, United Kingdom

2008-2012

Human Spaceflight and Exploration Course (Pass with Distinction)

Umeå University

Umeå, Sweden

2011

Additional Details and Interests

I am a native English speaker (with British Passport), fluent in French and Creole.

I have a passion rock climbing and enjoy cooking, as well as photography.

References are available upon request.