

Technical Skills

Languages

- Proficient in Python
- Experienced in MATLAB, Bash, Vim, L^AT_EX
- Familiar with C#, Java, Mathematica

Software and Technologies

- *Web Development*: Django, Django-Oscar, Cron, Fabric, Django CMS, FeinCMS
- *Server Infrastructure*: Apache, Nginx, Docker, Vagrant, Virtualenv, Amazon Web Services
- *Data Analysis Packages*: Pylab, Matplotlib, Origin, GNUplot, MS Excel
- *Version Control*: Git, Mercurial
- *Platforms*: Linux, OSX, Windows

Experience

Software Developer

London

Tangent Snowball PLC

November 2013 - present

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

- Extending and enhancing Django-Oscar to create dynamic bespoke e-commerce solutions conforming to the Model-Template-View framework.
- Negotiating and coordinating new procedures to reconcile content-driven legacy projects with modern programming ethos.
- Adapting to clientele needs by rapidly deploying and integrating novel functionality through various agile development techniques.
- Implementing and re-factoring existing code-bases via cutting edge technologies conducive to robustness, modularity, and productivity.

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

RHUL Physics Dept

Aperture Photometry Project

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

Worked under the supervision of Prof. V. Petrashov in the production of 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.

Sales Assistant

Neuhaus Chocolates

London

June 2005 - March 2013

Worked part-time within all of their stores in London including Harrods and St. Pancras International. I also have passed the rigorous Harrods store approval and interviews.

- Customer Service, handling of cash, dealing with customer complaints.

Education

Astrophysics MSci

Royal Holloway University of London

2008-2012

Egham Hill, Egham, TW20 0EX

Human Spaceflight and Exploration Course (Pass with Distinction)

Umeå University

2011

Umeå, Sweden, SE-901 87

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.