

Technical Skills

Languages

- Proficient in Python (2 & 3)
- Experienced in Java, GoLang, Perl, JavaScript, Bash, CSS, L^AT_EX
- Familiar with C#, SCSS, Less, Mathematica, MATLAB

Software and Technologies

- *Web Dev*: Django, Django-Oscar, Flask, Django CMS, Amazon Alexa, REST Framework
- *Infrastructure*: AWS, Docker, RabbitMQ, Nameko, Cron, Apache, Celery, AWS Lambda
- *Data Analysis Packages*: Numpy, Pylab, Matplotlib, GNUplot, New Relic
- *Version Control*: Git, Mercurial
- *Continuous Integration*: Jenkins, Gitlab CI, Travis CI, Circle CI, Rundeck, Sentry
- *Platforms*: Linux, MacOS, Windows
- *Architectures*: Scalable, Server-less, Micro-services, Monolithic, Distributed, REST API
- *Coding Practices*: TDD, DDD, Agile, Kanban, Scrum

Experience

Lead Developer/Architect (Contractor)

London

Sainsbury's PLC (associate of Daemon Solutions LTD)

April 2018 — Present

Building and architecting Amazon Alexa Skill with adaptive and scalable architecture using stateless server-less infrastructures such as AWS Lambda functions.

- Implementing Python driven voice interfaces for interaction with APIs within existing commerce infrastructures to allow for seamless voice customer interactions with baskets.
- Optimising the development pipelines and life-cycles by adopting and improving new technologies to create complex analytics and monitoring dashboards with bespoke alert thresholds.
- Delivering, specifying and engineering novel features and user interaction flows using innovative voice recognition technologies.
- Maintaining and improving functionality and security of financially critical legacy systems.
- Collaborating extensively within a diverse, multi-disciplinary team and providing constructive contributions during pairing sessions.

Senior Developer (Contractor)

London

MyOptique Group

Feb 2018 — April 2018

Built server-side REST API in highly complex parallelised and scaled architecture for an internal order tracking and management system.

- Implemented internal API endpoints using Django Rest Framework to manipulate database resources.
- Delivered new features in an existing distributed and multi-threaded environment using RabbitMQ and Celery.
- Managed highly complex abstraction layers while refactoring existing codebases to adhere to modern coding practices.

Senior Developer (Contractor)

London

Arts Alliance Media

Feb 2017 — Dec 2017

Engineered server-side logic in a polyglottic environment with software designed for cinema management and film scheduling.

- Implemented complex continuous integration for components engineered in Perl and Python.

- Built new tooling and complex abstracted class structures to fulfil technical requirements such as new advert selection algorithms.
- Worked as part of a team to deliver features within expected deadlines.

Software Developer (Contractor)

London

Lystable

Oct 2016 — Jan 2017

Engineering server-side logic for software built with a domain-driven micro-service architecture using Flask/Python3.5 for an employee management solution.

- Implemented complex business-critical logic including financial systems.
- Contributed to discussions regarding the evolution of complex distributed architecture and assessed future implications of design decisions.
- Provided constructive and objective feedback using procedures such as code-reviews to ensure code quality and sanity within the team.

Software Developer (Contractor)

London

Pancentric Digital

Feb 2016 — Oct 2016

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

- Provided support and maintenance on CMS-driven web applications with highly complex business-critical logic.
- Provided guidance and mentorship to a small team.
- Modernised existing codebases with an emphasis on Continuous Integration and best practices.
- Introduced new processes to streamline the delivery of projects in accordance to deadlines.
- Implemented and re-factored existing code-bases using innovative technologies conducive to robustness, modularity and productivity.
- Assessed the viability solutions and delivered 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 micro-service architecture and dynamic scaling.
- Extended and enhanced Django-Oscar to create dynamic bespoke e-commerce solutions.
- 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 for business and financial decisions.

- 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.
- Developed a web API which provided content to a number of academic journals.

Education

Astrophysics MSci

Royal Holloway University of London

Egham, United Kingdom

2008 — 2012

Aperture Photometry: Performed complex data analysis in Python (Numpy and Matplotlib) on astronomical data. Trained in using high specification equipment (e.g. telescopes, thermoelectrically cooled cameras, electron microscopes etc) and contributed to research in extreme low-temperature physics.

Additional Details and Interests

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

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

I am a regular DjUGL attendee.

References are available upon request.