

James Cooke

Python Developer

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I am an experienced software engineer and have been working with web technologies since 2002. Daily I use automated testing and deployment to generate best quality code on projects. I am looking to work with a company that is iterating and improving its product set over a long-term life cycle, delivering measurable value to their customers.

Primary Technical Skills

Bash, GNU/Linux, Git, **Python**, API development and documentation, SQL, Test Driven Development, Vim

Recent Experience

My recent work involving Python. A full CV is available on request.

Backend Developer.....

Construct Technology

Oct 2017 → Current

Using: Ansible, Couchbase Sync Gateway, Django Rest Framework, Grafana, Swift (1 year, 1 month)

At Construct I have focused on improving the stability and predictability of the API and hosted services, while continuing to develop functionality. Detailed, reliable statistics pay dividends when working with complex systems, so one of my first tasks as a permanent employee was to build out a Grafana and graphite server collecting data from Construct's API servers, queue workers and Couchbase nodes.

Previously, from October 2014 to September 2017, I worked as a Coding Cooke contractor with Construct to build their original API server and notifications system, and later to migrate from Dropbox datastore to Couchbase.

Python Development Contractor.....

Coding Cooke Ltd

Dec 2013 → Sep 2017

(3 years, 10 months)

My primary goal at Coding Cooke was to turn the transient nature of contracting to my advantage by working with as many varied clients as possible in order to boost my experience of all sorts of technical environments. I always focused on creating high quality code that could be maintained after any particular contract had ended. Coding Cooke had thirteen clients, four of which are below.

Glint Pay

Apr 2017 → Jun 2017

Using: Cucumber, Django Rest Framework, Docker Compose, Docker, MySQL (3 months)

Glint provides a gold-backed prepaid Mastercard and mobile app using a microservices architecture of around fifty containers. At Glint I developed and integrated new admin service containers, backfilled Cucumber tests against existing transaction services and refactored existing Django code.

Department for International Trade

Jun 2016 → Aug 2016

Using: Django, MS Azure, MS Dynamics CRM 2011 (3 months)

DIT were developing an internal tool called Data Hub to enable them and their partners to better understand, manage and record their relationships with businesses. I worked on building an integration test suite for the Python Microsoft Dynamics 2011 library, as well as conducting some research into the existing data and technical needs of the project.

Huq Industries

Nov 2015 → Apr 2016

Using: Ansible, Django Rest Framework, PostgreSQL

(6 months)

Huq is an analytics provider for mobile app developers. As the sole backend developer on this project, I worked on the three main parts of the backend system to get them production ready for launch:

- Collector: To provide a quick turn around and collect all data on Huq's API.
- Resolver: To correlate location information provided by geolocation services into concrete place data.
- Reporting: The API that provides aggregate information to Huq's customer dashboard.

Scoota

Apr 2015 → Oct 2015

Using: AWS Redshift, Django Rest Framework, Grafana, PostgreSQL

(7 months)

Built on Amazon's Redshift data warehouse, I designed Scoota's warehouse relational structure, data ingestion and analysis processes. The ETL processed hundreds of millions of events daily, at regular intervals and in parallel, and compiled to per-Campaign report tables. As part of this contract I also developed a new integration test suite and dynamic schema change system that allows the client developers to upgrade the warehouse without taking it offline.

Lead Developer

Quib.ly

Nov 2012 → Oct 2013

Using: Pyramid, PostgreSQL, SQLAlchemy, Elastic Search, Redis, Chef

(1 year)

Responsible for the backend Python code, new feature project planning, server maintenance and release deployment for this Pyramid-driven Q&A website for parents. I managed the site through its public launch; Techcrunch and BBC traffic spikes; and continued development releases. During my time at Quib.ly, I implemented a TDD structure for backend development which has raised test coverage from 32% to 75%, the primary side-effect of which was to improve core code quality and team sanity.

Director

Fublo Ltd

Dec 2010 → Sep 2012

Using: Django, PHP, Solr, WordPress

(1 year, 10 months)

As a co-owner, co-director and backend developer at Fublo, I was involved all business processes. Initially most development was based on WordPress, however in 2012, we moved to using Django for client work with great results. Clients included Fallon London, We Are Social, Time Out London and NeuxPower.

Education

Imperial College, London

Oct 1998 → Jun 2002

MEng Computing (hons)

Selected Projects and Articles

Flake8 AAA

Feb 2018 → Current

github.com/jamescooke/flake8-aaa

(8 months)

A Flake8 plugin that checks tests follow the Arrange Act Assert pattern.

pysyncgateway

Nov 2016 → Current

github.com/constructpm/pysyncgateway

(1 year, 11 months)

Python library for communication with Couchbase Sync Gateway.

Arrange Act Assert pattern for Python developers

Jul 2017

jamescooke.info/arrange-act-assert-pattern-for-python-developers.html

This post introduces the Arrange Act Assert pattern of testing and shows how it can be used in a Python context with Pytest.

API Documentation and the Communication Illusion

May 2016

jamescooke.info/api-documentation-and-the-communication-illusion.html

How can documenting an API help us to communicate with our team and API consumer developers efficiently?