

SIMON HEWITT

9 SPAINES, GREAT BEDWYN, MARLBOROUGH, WILTS, SN8 3LT | 07799 381001 | [SIMON.D.HEWITT@GMAIL.COM](mailto:simon.d.hewitt@gmail.com)

PYTHON DEVELOPER, PROGRAMME LEAD

PROGRAMME DESIGN & DEVELOPMENT | TEAM MANAGEMENT | STAKEHOLDER ENGAGEMENT

A highly skilled, qualified and multifaceted technical developer and manager with extensive knowledge and understanding of designing and delivering core solutions and their re-use across multiple local markets. Hands-on developer with current experience in Python, Django, Go, Rust, Flask, Docker, Kubernetes, SQL, No-SQL, GIT, JavaScript and automated testing.

Effective leadership ability, able to establish and engage teams, to deliver and implement technology solutions on time and within budget, utilising organisational skills and programme architecture to meet programme objectives. Robust planning and strategic approach in the delivery of integrated programmes to achieve business benefits. Has strong technical ability, hands on experience and practical thinking that can be applied to any technical project, with a strong 'Can Do' attitude that overcomes technical and project obstacles. Experienced in dealing with customers, C level management, suppliers and internal teams.

AREAS OF EXPERTISE

Telecoms Knowledge & Exposure	Team Leading & Management	Senior Management Positions
Development & Design	Customer Management	Advising C Level Executives
Technology Implementation	Billing, Mobile Money & VAS	International & Local Markets
Python, Django, Tornado	Vendor Management	
SQL (MySQL, Postgres), MongoDB	Stakeholder Management	Solution Architecture
JavaScript, DataTables, HTML, CSS	Timeframes & Deadlines	Strategy Development

EDUCATION, QUALIFICATIONS & PROFESSIONAL DEVELOPMENT

✓ **MSc Computer Science**, Swansea University, September 2014 to August 2015

Modules: Embedded Systems, High Performance Computing (C & C++), Data Visualisation (3D Modelling), Web Development & Web Services, Human-Computer Interaction, GPU Programming,

Programming Languages and Patterns



Languages: C and C++, Python, Java, JavaScript, Swift

BSc Electronic Engineering, University of London, 1979

A Levels in Pure Mathematics, Applied Mathematics, Physics & Computer Science

8 O Levels, including English & French

CAREER SUMMARY

Verisk Systems inc

Jan 2022 to August 2023

- Python Django Rest Framework High volume APIs, using Swagger (and DRF_Spectacular) for self-documentation
- AWS Lambda data in Python, to provide an assurance function run daily to check data consistency. Using AWS CDK in TypeScript to define build and and run the Lamda
- Migrated MySQL to PostgreSQL
- Simplifying the database using JsonFields to replace complex related fields.

Guru Systems Ltd

Jan 2021 to Jan 2022

- Python Django Rest Framework - developing new Django back end and REST APIs
- gRPC integration to GoLang uservices.
- Developed Docker Swarm staging environment, using Redis, PostgreSQL, Django, Prometheus and Grafana
- Some work on an IoT domestic heat controller using ZigBee radio network

Oxford nanopore Technologies, Oxford

April to December 2020

- Python Django frontend developer: Designed and built from scratch an access audit and enforcement tool, to enable ONT to reach medical-grade certification for the manufacture of their world-leading DNA Sequencing devices.
- Developing from scratch a tool to manage and execute direct SQL corrections to databases (to correct production errors such as bulk updates of product sequence number errors) while maintaining authorisation and audit.
- Built a CI chain using GitLab CI with automated unit testing, view testing (Python and Django) and Cypress UI testing, automated generation of Docker images and deployment to AWS nodes for development, integration and production.
- Extensive JavaScript and JS libraries such as DataTables to refine the UI. AJAX techniques for fast response and improved UI, especially multi-tab views.
- Extensive REST API set to enable other Apps to verify user authorisation and to automate updates.
- Docker and AWS (as well as on-prem) infrastructure.
- Agile sprint based development using Jira, Confluence, GitLab

Navenio, Oxford

April 2019 to April 2020

- Python backend developer – Tornado, micro services, Django and Django REST
- Extensive use of Linux (Ubuntu on AWS) PostgreSQL, MongoDB, RabbitMQ, Redis
- Taking code to industrial grade, migrating it into Docker containers for operation under Kubernetes and Helm
- Moving all 'secrets' into a HashiCorp Vault and Helm Secrets
- Developing a PyTest suite and Cypress HTML tests to prove operation in a K8 cluster

- Developing a Jenkins CI pipeline for all of the above
- Rewrite management portal into Django 1.11 running on a K8 cluster

Oxford University Press

November 2017 to March 2019

- Python/Django developer
- Extensive use of Linux (Ubuntu), SQL (MySQL, SQLServer), Python 2.7 and 3.6, Django (1.11)
- Feature development and bug fix
- Migrated a 12 App site from Python 2.7/Django 1.5 to Python 3.6/Django 1.11
- Agile environment, meeting constant business pressure
- JavaScript and jQuery front end development
- TDD, Selenium test development
- Python Requests for 'screen scraping' to automate to external web sites

Cirrus Logic

September 2017 to November 2017

Python Numpy Pandas developer

- Very short duration contract to help catch up on processing test results
- Manipulating very large test data sets to derive performance metrics (eg False rejection Rate vs False Acceptance Rate)
- Python 3, Numpy, Pandas, Linux, CI and code-quality tools.

Vodafone Global (Newbury)

November 2015 to September 2017

Solutions Architect

- Direct the technical evolution of an EU wide permissions management tool, in alignment with pending EU GDPR legislation for deployment across all EU markets and potentially beyond
- Led the team in moving the monolithic solution to a fully cloud-based delivery (Amazon AWS) and develop REST APIS's to allow simple integration within existing Vodafone OpCo customer channels
- Reduced the timeframe to build the infrastructure stack from 6 weeks down to just 12 minutes (Terraform)
- Developed an iOS App and a web site as a POC for an alternative, simpler delivery approach
- Led an offshore development team to deliver iOS and Android Apps for smartphone diagnostics, in just 3 months.
- Node.JS and Lambda App to simplify emailing of diagnostic reports to VF Italy customers.

July 2015 – October 2015

Remote Power Monitoring development

- Working with a local Solar Power startup, developing a remote switching station monitor
- Python 3 on Raspberry Pi and custom electronics to monitor voltage, current, temperature, intrusion detection
- GSM Module to send alerts by SMS - chosen to allow working in remote areas with minimal radio coverage
- Python and Django web & DB back end

I developed all electronics and the Python code, but the project was abandoned (after reductions in the Solar Power subsidy made it uneconomic). The remote sensor was complete, comprising some 10,000 lines of Python. The web server was embryonic, receipt and store of the SMS was complete but user interface was minimal.

September 2014 – June 2015

MSc at Swansea University – Computer Science

- The Swansea MSc is very hands on and practitioner oriented
- 12 modules in all including Java, Web Development with C#, Robotics, Language Structures, High-performance Computing.
- Full details available

Telecom New Zealand

April 2013 to August 2014

Lead Architect, Billing & Finance

- Led the Billing and Finance Architecture team with a focused objective to deliver self-developed component of a complete re-engineering of the entire IT stack, inclusive of Online, CRM, Fulfil, Assure and, Billing & Finance
- Spearheaded the team to deliver the first release on time, successfully moving all Mobile and voice to a single real-time rating and balance management system, using CSG SingleView
- Completed scope and design in preparation for the next release, aimed at completing real-time rating for all Mobile, voice, data and text, enabling complex cross-product, real-time bundling
- Inherited the ownership and leadership of the Business Information (BI) and Information Management (IM) teams consisting of 14 individuals
- Delivered an entirely new EDW solution, using IBM technology with combine PDOA (DB2) and PDA (Netezza) engines, bringing advanced BI capability to Telecom NZ

Qtel International

June 2010 to January 2013

IT Director, New Product Delivery

- Aligned overall business growth with the development of strategy to support group-wide products and service and identified a need for IT to deliver and support this function
- Created and managed the team to support the deployment of a Mobile Music service, Mobile Social Networking, Mobile Money and Group-Wide Intranet, across multiples operations in the region
- Ensure created team, consisting of Project Managers, Solutions Architects and Operations Managers, worked and adhered to ITIL standards
- Upon leaving the role, Qtel had 5 products live in 5 operations with 3 major Mobile Money launches planned for the subsequent year

Qtel International

June 2008 to January 2010

IT Strategy Director

- Developed the IT Strategy practice across 14 OpCo's in the MENA region, recruited and established an Architecture team to cover BSS/OSS space and selected and delivered IBM System Architect tool to support practice
- Concentrated on convergence on common platforms and design patterns, minimising project time, cost and risk
- Repeated same implementation patterns, by leveraging group volumes to negotiate advantageous group-wide framework contracts, which led to and achievement of savings, in excess of US \$10m, achieved over 3 years

On leaving the role, 4 operations were either using or transitioning to the common Prepay and Postpay billing suite, with similar convergence on Data Warehousing and SDP

PREVIOUS EMPLOYMENT

Includes a 14-year history with Vodafone, covering a multitude of positions, as outlined below:

Service Strategy Lead, November 2007 to June 2008

IT Strategy Lead, November 2006 to November 2007

Global IT Architect, Billing & Sales Channel, September 2004 to November 2006

UK IT Architect, Billing & Sales Channel, May 1999 to October 2004

Vodafone Australia, April 1998 to April 1999

Vodafone Retail, 1994 to 1998

Previous work includes Development Team Leader, Software Manager, Developer & Team Leader, and Analyst /Programmer.

Experience in cheque printing machinery, Yellow Pages publication, nationwide circuit routing (at BT)

ADDITIONAL INFORMATION

- Interests
- Running and cycling
- Other
- Full UK Driving Licence

REFERENCES AVAILABLE ON REQUEST

LANGUAGES AND SKILLS SUMMARY

C	FLUENT IN THE PAST
PYTHON	FLUENT
DJANGO	FLUENT
SQL	FLUENT (MYSQL, POSTGRES)
MONGODB	GOOD
GO	GOOD
RUST	STARTER
JAVASCRIPT, JQUERY	GOOD
REACT	SOME, LEARNING
C++	SOME
JAVA	FAIR
HTML5, CSS	GOOD
BOOTSTRAP, WEBPACK	FAIR
CYPRESS IO, PYTEST	EXCELLENT
DOCKER, KUBERNETES	GOOD
HELM	FAIR
ANSIBLE	SOME
AGILE	USED FOR THE LAST 5 YEARS
JIRA, CONFLUENCE, BITBUCKET, GIT	GOOD
AUTOMATED TESTING	UNIT TESTS IN PYTHON, SELENIUM, CYPRESS
AWS	GOOD – HANDS ON EXPERIENCE OF EC2, S3, LAMBDA, API GATEWAY, DYNAMODB. COMPLETED THE `DevOps Deployment Automation with Terraform, AWS and Docker` COURSE FROM UDEMY
Prometheus, Grafana	Some