

## **Prashant Tiwari**

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I am always curious about everything tech and keen to learn. In the past 17 years, I have worked in various domains like financial services, oil and gas, fintech, medical robotics, insurance, cyber security, and textiles. I have worked in a front office team handling low-latency trading systems. I have been involved in all backend development aspects like DevOps, Development, CI/CD, Linux, Docker, etc.

### **Mar 2022 – Nov 2023: Data.ai (via TrustInSoda): Senior Backend engineer**

Lead transforming EC2-based Python workflows to AWS serverless frameworks. Created IaasC using SAM. Mentored Data.ai staff on System architectural decisions and best practices around cloud deployments.

Tools used: Python, Pytest, AWS API Gateway, AWS Step Functions, Lambda functions, and Event Bridge SAM.

### **Jul 2021 – Feb 2022: HSBC (via TEK): Specialist engineer**

I worked on a project to implement an automated security review of various HSBC assets. Also helped set up team structures based on business needs. I also worked on Kubernetes, Docker, Python, and various security review tools for Docker images, Python, and AWS infrastructure.

### **Apr 2020 – June 2021: Medtronic: Staff platform engineer**

Used AWS EKS and Ansible to deploy a proof of concept Kafka environment for internal microservices. Worked on vendor selection for Kafka deployment. Helped optimise bitbucket pipelines to reduce time to production.

### **Mar 2019 – Apr 2020: Genesis Oil and Gas: Python consultant**

Helped automate low-level engineering involved in undersea pipeline design. Worked on new dashboards to show the results of calculations.

Tools used: SymPy, SciPy, NumPy, Pandas, Dash.

### **Oct 2018 – Mar 2019: Bank of America: Python developer**

I worked on various middle-office PnL migration projects using Python and Flask. This project involved modernising the frontend and backend API for PnL calculations in BAML.

Tools used: Flask, Python

### **May 2018 – Oct 2018: CMR Surgical: Python developer**

#### *Retrace project*

I worked on Python and Flask projects, helping CMR identify design, requirement, implementation, and testing gaps. Helped develop the compliance self-auditing tool for FDA certification to ascertain appropriate tests have been performed and their status. An internal trace of the audit that covered everything from Requirements Documents to Test Procedures to Tests and results.

Tools used: Git, Flask, Python, Pandas, MongoDB

#### *Logbook project*

Helped develop CMR's internal digital acceptance and audit trail service.

Tools used: Flask, Python, MongoDB

### **Feb 2018 – May 2018: RSA: Python developer**

As a Backend Python developer, I help develop and enhance the pet insurance portal for filing claims.

Tools used: Django REST Framework, Celery, and docker

**Dec 2016 – Feb 2018: PowerVault: Backend developer**

I have managed all Python-based components deployed in the cloud. I was also leading the effort on the company's upcoming flagship product. Responsible for the end-to-end flow of IoT information from the point it hits messaging servers till it's displayed on the front end or is in the form to be used by in-house data scientists. I helped refine the existing data pipeline for the IoT backend. I helped develop a new massively scalable IoT backend that fit the growing company's needs—and also developed interfaces with external agencies.

Tools used: Python, Pandas, Kafka, Microservices, Mosquitto MQTT, Async Python, Flask, Apache, HTTPS, Ansible, Django Rest Framework.

**Nov 2015 – Oct 2016: Edgefolio: Computer Scientist/ Sr. Backend Python Developer.**

Edgefolio is a London-based Fin-Tech Startup developing solutions for the finance industry. It's a Python shop currently ten members strong that works on a technical stack of Django, REST, Pandas and some data science. Designed enhanced and maintained data acquisition layer for flagship project. Responsible for comprehensive test coverage and doing TDD where possible.

**Jan 2015 – Sep 2015: Team Lead at Persistent:** Responsible for back-end Python programming; I implemented and helped implement an ambitious project to automate all terminal side testing globally. Designing and enhancing Python-based test automation framework. Helped evolve a POC project into a full-fledged functional product in less than six months. Wrote server code to handle TCP/IP communication with thousands of Point of Sales devices.

**Mar 2011 – Jan 2015: TCS Consultant at Morgan Stanley:** Managed \$2m+ worth of agency flow from algorithmic trading spread across almost all European destinations—part of a European team specialising in providing high-speed algorithmic trading platforms. Perl/Python/Shell Integration specialist was responsible for client onboarding, continuous integration environment, and all Perl/ **Python development**. Sole maintainer for Python-based object-oriented library for parsing configuration files used by various reporting and risk identification tools and for process management.

**Nov 2009 to Feb 2011: TCS Consultant at Pune for Morgan Stanley account:**

Responsible for all automated testing for the RDDS MS risk assessment engine. As a Perl developer, I automated testing for the risk assessment engine used by Morgan Stanley.

**Nov 2006 to Nov 2009: Core team member at Merce Technologies Pvt Ltd. :**

Developed, tested and deployed Perl data acquisition applications at all 5 Zodiac factories spread across India as an individual contributor. Developed Perl CGI applications for various interfaces and screens for Merce's flagship project.

**Certificates**

- Endorsed by 'Tech City UK' as 'Exceptional Promise' for Tier 1 (Exceptional Talent) visa.
- SCJP (Sun Certified Java Programmer for version 1.4).
- edX Verified Certificate for Introduction to Python for Data Science
- Using Python to Access Web Data by Coursera

**Bachelor of engineering in electrical and electronics 2006 RGPV India.**

**Specialities:** Python, Perl, Jenkins, Git, Jira, socket programming, shell scripting, FIX protocol, Native exchange protocols, application support, RCA, system administration, Unix, testing, Sybase, Mysql, Postgres, Autosys, Front office, Low latency application support.