

PATRICK BUHAGIAR

LinkedIn: [linkedin.com/in/patrickbuhagiar/](https://www.linkedin.com/in/patrickbuhagiar/)
portfolio: <https://patrickbuhagiar.github.io/portfolio/>
Blog: patrickbuhagiar.com | GitHub: github.com/PatrickBuhagiar

SUMMARY

A Technical lead and subject matter expert at Freetrade who is proficient in Typescript (Node), Terraform, Kubernetes and Google Cloud while also holding two certifications in AWS and another in Google Cloud. Keen on knowledge sharing, mentoring always eager to step out of comfort zones.

Graduated with a master's degree in software engineering at the University of York. The dissertation involved measuring the impact of macro-economic parameters and global markets when predicting the FTSE Index. This study made use of feed-forward networks and an ensemble approach with the TensorFlow machine learning platform. More of this can be read on www.patrickbuhagiar.com.

PROGRAMMING SKILLS

Main Skills

TypeScript	Terraform	SQL	HTML	Python
Scala	Akka	Swift	Kotlin	Java
Git	Docker	GraphQL	Kubernetes	CircleCI

WORK EXPERIENCE

Jan 2021 – Present Senior Software Engineer, *Freetrade*, www.freetrade.io

- Subject matter expert for the funding domain. This includes bank transfers, open banking, withdrawals, Google/Apple Pay, Swish and direct debit.
- Defined the architecture and led the team on multiple projects, including across other domains such as Onboarding, Assets and Authentication.
- Successfully delivered on key customer features, such as instant bank transfers, direct debit, launching in Sweden (BankID, onboarding, Swish, ISKs), Web, Treasuries and Recurring Orders as well as internal cost saving initiatives.
- Heavily involved in architectural decisions for transitioning from our monolith platform of cloud functions and Firestore to Kubernetes and Postgres.

- Chaired and led weekly engineering sessions, with the focus on knowledge sharing, RFC discussions and planning for architectural maturity.

Sep 2018 – Jan 2021 Full Stack Engineer, *BJSS*, www.bjss.com

- NHS e-RS
 - AngularJS 1.2 to Angular 10 migration. The application was first upgraded to AngularJS 1.8, then using ngUpgrade the app was running AngularJS and Angular side by side, allowing the upgrading and downgrading of components, directives, and services.
 - Redesigning and re-implementing parts of the application in Angular using the open-source [NHSUK frontend](#) library.
 - Maintained the in-house ETL process, entirely written in PostgreSQL.
 - Introduced sending patient letters via e-mail. This involved integrating with NHS Login (identity service) and using AWS SES.
 - Introduced in-context help using Bootstrap Tours, which helps explain new features to users with on-screen bubbles.
 - Support and bug fixing.

Jul 2015 – Sep 2017 Software Engineer, *Ixaris*, www.ixaris.com (*now bought out by Nium*)

- EU Horizon2020 project called the [Open Payments Cloud](#) (*now weavr.io*)
 - Implemented the back-end using a microservice architecture. Each microservice was implemented using Spring Boot REST, and used other technologies such as Kafka, Zookeeper and ProtoBuf. These microservices include transactional, financial instruments and authentication-based services.
 - Implemented and maintained a custom language for creating payment models, based on YAML.
 - Web development using ReactJS and TypeScript. Designed and implemented major features of this project, such as wizards for creating deployment of payment applications.
 - Implemented automatic push to production, where any new data that is found on the staging environment would be migrated to the production environment under certain rules and criteria.
 - Wrote a significant portion of documentation with regards to project personas, processes, and lifecycles.
 - Was one of the mentors that helped organise a [hackathon](#) in London to get developer feedback for the Open Payments Cloud.
- Core Team
 - Bug fixing the transaction engine, settlements, and static web pages.

- Jul 2014 – Sep 2014 Junior Software Developer, *Bit8*, www.bit8.com
· Student Intern. Implemented a UI validations framework in JQuery.

EDUCATION

- Sep 2017 – Sep 2018 Graduated, M.Sc. (Hons) Software Engineering, *University of York, York, UK*
Award Mark: 75
- Oct 2012 – Nov 2015 Graduated, B.Sc. (Hons) Computing Science, *University of Malta, Msida, Malta*
Award Mark: 63

CERTIFICATES AND COMPETITIONS

- Sep 2020 Google Cloud Associate Cloud Engineer
Certificate: <https://bit.ly/2ZVnAnz>
- April 2019 Won an internal self-driving race competition at BJSS (AWS DeepRacer).
LinkedIn Post: <https://bit.ly/3krYkgo>
- Nov 2018 AWS Certified Solutions Architect – Associate
Certificate: https://1drv.ms/b/s!At8YANB_qehaq_E5O5HKhvDcileaQw
- Nov 2018 AWS Certified Developer – Associate
Certificate: https://1drv.ms/b/s!At8YANB_qehaq_Ev19DSh8m2YTUZkg
- Apr 2017 Machine Learning, Andrew Ng, *Stanford University*
Coursera Course: <http://bit.ly/2yfSIXU>
- Sep 2016 Functional Programming Principles in Scala, *École Polytechnique Fédérale de Lausanne*
Coursera Course: <http://bit.ly/2jIJOCJ>
- Feb 2016 Hash Code Google
Ranked #470 from 17,000 participants. Certificate:
https://1drv.ms/b/s!At8YANB_qehap6x8MpAvockWrg7bXA