

Stephan Kostov

stephan.kostov.rv@gmail.com ❖ (+44) 7446903000 ❖ github.com/stephankostov ❖ Edinburgh, Scotland

A diligent and forward-thinking team-player with a comprehensive set of problem-solving skills. These were developed through my background in engineering both software and mechanical, along with a core data skillset through an MSc in Data Analytics. Most recently I've had the opportunity to take a sabbatical break from work to learn all things data through courses, textbooks, and [ML development projects](#). With these skills I am now wholeheartedly committed to contribute toward the fascinating and exciting data world.

EDUCATION

University of Glasgow

September 2020 - June, 2021

MSc Data Analytics (1st Class)

Glasgow, Scotland

- Relevant Classes: Statistics, Bayesian Statistics, Probability, Data Analysis, Deep Learning for Big Data, Machine Learning, Application Development.
- Project: Dissertation in "Predicting Astrophysical Properties of Stars" through Statistical and Machine Learning modelling.

University of Strathclyde

September 2015 - May, 2020

BEng Mechanical Engineering (1st Class)

Glasgow, Scotland

- Core Projects:
 - Dissertation in "Optimising Space Flight Trajectories" through an exploration and tuning of the state-of-the-art computation optimisation algorithms.
 - Design and Manufacturing of a model drag racer car in a team of 5.
- Competing in the University Men's Basketball 1st team (division 1).

WORK EXPERIENCE

Sky Group Ltd

April, 2021 – December 2022

DevOps / Software Engineer

Livingston, Scotland

DevOps Infrastructure Responsibilities:

My main responsibilities as the DevOps engineer for a scrum team was to manage the deployments and infrastructure around the software development lifecycle.

- Service Deployment
 - Orchestrated seamless deployments of team's services, ensuring continual availability and reliability.
 - Proficiency in service containerisation using Kubernetes to host Dockerised Images.
 - Configuring and managing legacy services on Linux.
- Monitoring and Metrics
 - Implementing Prometheus performance metrics pipelines into InfluxDB.
 - Designing interactive dashboards with Grafana for real-time time-series data visualisation.
- Log Storage
 - Implementing readable logging using ElasticSearch.
 - Leveraging Apache Kafka message queues for robust log storage.
- CI/CD Deployment Pipelines
 - Streamlining software deployment pipelines using Jenkins and Gitlab, ensuring reliable hands-off deployments.
 - Automating testing, integration, and production workflows.
- Server Setup
 - Proficiently managed both Unix and Windows servers, optimising for performance and security.

Chatbot Development Project:

In addition to my DevOps responsibilities, I also completed a development project to provide a foundation for further automations for our support team.

- Developed an internal chatbot application for Slack and Microsoft Teams.
- Chatbot served as a core platform to add automations for the support team's requests.
- Built in Javascript from scratch following test-driven development and functional programming paradigms.

Hong Kong Polytechnic University (IAESTE Internship Program)

June 2020 – August 2020

Aeronautical Engineering Intern

Hong Kong

- Assisting a research team in investigating aerofoils by computationally simulating their physical hydro-tunnel experiments for use in an academic paper.
- Presentation of internship experience to colleagues, university board members, and internship program staff.

ADDITIONAL COURSES AND LEARNING

- **FastAI: Practical Deep Learning for Coders** February 2023 - May 2023
 - Course on the foundations of deep learning. Here I learned the foundations of state-of-the-art models, as well as their implementation and training using PyTorch.
- **FDM Software Development Graduate Program** November 2020 - April 2021
 - Training course in full-stack OOP with Spring Boot Java and React, also including separate weeks for each SQL, Python, and Linux.

OTHER ML PROJECTS (see [github readme](#) for more details)

- **Cooking Recipe Generator from Ingredient Molecular Composition:**
 - Full-scale generative ML project including engineering datasets, model creation, and training.
- **Audio Transcriber & Parser:**
 - Useful app to transcribe podcasts to aid notetaking. Developed using open source models and transcription, translation, NLP topic modelling, and summarisation.
- **Stable Diffusion Model Fine-tuning:**
 - Created a fine-tuned image generation model to create character art for my Dungeons and Dragons campaign.

TECHNICAL SKILLS

- **Programming:** Python, Javascript, Bash, HTML/CSS, R, Java, Groovy, MATLAB
- **Machine Learning:** PyTorch, NumPy, Huggingface
- **Data Visualisation:** Matplotlib, Pandas, R, Grafana
- **Data Engineering:** Pandas, Dask, Apache Spark, Apache Beam
- **Web Development:** React, Spring Boot
- **Infrastructure Technologies:** Unix, Jenkins, Docker, Kubernetes, Kafka, ElasticSearch, Prometheus, Azure
- **Databases:** Oracle SQL, PostgreSQL, InfluxDB, MongoDB, BigQuery

INTERESTS

- Basketball, Rock Climbing, Videogames, Piano, Reading, Cooking/Baking, Skiing, Travel