Enrico Zammit Lonardelli

Theoretical Physicist and Software Developer

+44 78 74 10 57 55 enrico.zammitl@gmail.com London, UK

enricozammitlonardelli.com linkedin.com/in/enricozammitl github.com/enricozammitlon gitlab.com/enricozammitlon

Professional Summary

- I am a physics graduate with a strong DevOps mindset interested in full-stack software development
- Hard working spirit and eagerness to learn shown by the 10+ hackathons I have attended across 5 countries
- Starting on a technology graduate program at HSBC Bank plc in London in September, 2020

Technical Skills

5+ years experience: Git, Python, C++, Node.js, React.js
2 years experience: Java, PHP, Amazon AWS, Linux
1 year experience: Docker, Tensorflow + Keras Machine Learning

Relevant Experience

Superhero Science Competition

Pro-bono in collaboration with NGO Euromedia Forum   Sep. 18- Current

- An initiative to design a completely online superhero themed science competition for children and students ranging from 9 to 14 years old. This is an free, open nationwide (Malta) for the duration of 5 months every school year.
- Single-handedly designed and maintain a serverless lambda API with Node.js on AWS services with a self-scalable client service on React.js. Developed using CI/CD pipelines with Docker and Cloudformation.
- Technologies used: Serverless, Gitlab, AWS Lambda, API Gateway, CloudFormation, React.js, Material UI, DynamoDB, AWS IAM, AWS Cognito, Netlify. Available at superheroscience.info.

Intern Developer

Novacoast, Manchester, UK   Jan. 20 - Sept. 20

- Collaborated in a team of 4-5 developers led by a senior software developer.
- Worked on front-end in React.js and Material UI and also resolved issues where required in the backend in Go or the worker in Python3. A great learning experience since I had never worked with Go or used testing suites such as Jest.
- Improved my team working skills and flexibility since the company is based mostly in the US so working at strange times of the day was sometimes needed.
- Drastically elevated my abilities by working on constant constructive feedback, specifically towards developing production-ready, stable packages which are also security focused first.
- Technologies used: Gitlab Enterprise, React.js, Material UI, Go, Python3, Docker, Jest, Enzyme

Education

MPhys Physics with Theoretical Physics (Hons.)

The University of Manchester, UK   Sept. 16 - Jun 20

- Final total grade: Upper Second Class (Mphys final year project 78%)
- My final year project was using deep learning techniques to create fast simulations alternative to Monte Carlo techniques. Produced very promising results and ended up presenting to numerous scientific groups. Github repository
- Technologies used: Python3, Docker, Singularity, GANs, Tensorflow, Keras

Other Notable Experience

Dark Matter Research Intern

Rutherford Appleton Laboratory, Harwell, UK   Jul. 19 - Aug. 19

- Supervised by Dr.Pawel Majewski, I carried out data analysis on noisy simulation data
- Produced an all-round simulator for a detector specifically aimed at detecting the Migdal effect, a cutting-edge technique for dark matter detection
- As a personal extension I generated a machine learning model to classify signal images with 83% accuracy
- Technologies used: Git, Python, C++ , Fortran, Keras ML, Degrad, Magboltz, SRIM, Geant4

iGaming Frontend Developer

Raketech, Malta   Jun. 18 - Sept. 18

- Maintained 4 high revenue VIP websites and coordinated with a team of SEO managers and content writers
- Gained experience in working with Agile methodologies and a deadline-driven environment
- Achieved a complete face lift of a particular high revenue website during my short stay
- Technologies used: Git, PHP, Wordpress, Docker, Jira, Bitbucket, Confluence

Research Intern

University of Malta, Malta   Jun. 17 - Sept. 17

- Supervised by Dr.Pierre-Sandre Farrugia, I modelled auxetic materials using ANSYS 13.0 to study the design of different materials, particularly starting from a shape and modelling it so as for it to become auxetic in nature.
- Gained invaluable experience in research procedures, 3D modelling, auxetics and outside-the-box thinking.
- Published in a peer-reviewed journal as coauthor and most recently received an award by Wiley publishers for being one of the most read papers in 2018-2019.

Technical Service Representative

Hornet Services, University of Manchester, UK   Sept. 16 - Jun. 17

- Responsible for technical assistance with any network IT related issues around university campuses
- Gained experience in IT technical services, teamwork skills and customer relations

Languages

Native: Maltese, Italian, English
Proficient: French
Learning: Russian

July 2, 2020