

Andrea de Marco

Flat 45, 9, Zinc Street, Sugar House Island, E15 2QZ, London
andrea johndemarco@gmail.com // +356 79434407
www.linkedin.com/in/andrea johndemarco/ // www.andrea johndemarco.com

Relevant Experience **Software Engineering Manager, Stuart, London, UK – Sept 2019 - Present.**

- Lead the **Payments engineering team** which owns all of Stuart's technical financial processes. Our systems process **EUR 300M+ annually in pay-ins and pay-outs.**
- Successfully managed a cross functional project with multiple parallel work streams (Python, Ruby, Flutter) to launch an updated business model aiming to bring in **EUR 300k annually in additional profit.**
- Architected an initial system of **6 cross-functional event driven micro services** earmarked to achieve Stuart's **financial and compliance targets** using NodeJS/Typescript and React.
- Drove a company wide initiative to **standardise and simplify** Stuart's pricing strategy to reduce costs, clarify pricing for clients and maximise efficiencies.
- **Managed 3 remote and hybrid engineering teams with 12 engineers with low turnover.**
- **Recruited, led and grew 20+ engineers** in a remote and hybrid culture with a focus on promoting a strong united team culture. Introduced System Design interviews company wide.
- **Facilitated 3+ international workshops** to up skill team members improving their proficiency for new technologies, internal knowledge sharing and team building.
- **6+ years** working in the capacity of a **software engineer** and technical lead across a range of technology stacks and frameworks (Python, NodesJS/Typescript, AWS, React, Ruby, Retool, Flutter).
- **5+ years** of **people management and leadership** experience.
- Founded and expanded Stuart's **Automation engineering team** from **scratch to an 8+ person function**, fostering a culture centred around engineering best practices. **Later led this team's transition into the Tech department.**

Promoted to **Senior Software Engineer** on **July 2020**. Promoted to **Software Engineering Manager** on **July 2021**.

Kaggle NLP Challenge. Imperial Algothon at BlackRock – Oct 2018
First Place in the individual competition and Top 5 for best overall idea.

Individual responsibilities included setting up the entire NLP based algorithm to compliment an LSTM model that predicted the price in a mixed stock over the next few months. The algorithm generated a sentiment score based on the text found in articles from Reuters.

Research Internship. Translational Medical Device Lab, Galway, Ireland – July 2018 - Sept 2018

- Focusing on microwave ablation to achieve localised and targeted lesions in the adrenocortical glands.
 - Investigating antenna performance and design, through simulations carried out in CST Studio Suite 2018.
 - Performing experimental trails on excised tissue (liver, muscle and fat).
 - Manufacturing and testing of antennas as medical catheters.
 - Investigating the differences between coaxial and triaxial antennas.
 - Understanding the trade offs in duration and power configurations.
- Academic paper presented at PIERS 2019 in Rome.

BI Developer. Eunoia, Malta – June 2017 - May 2018

- Established QA protocols and documentation procedures across all domains in the company.
- Worked on the front-end and back-end development of CFOUR - a financial consolidation tool. Code based on C#, Javascript and Kendo, facilitated through a Git repository.
- Supported this development through intricate documentation on the software itself, as well as its implementation.
- Implemented the CFOUR system on client's servers.
- Worked with massive databases using SQL and built analytics using Panorama Nector.

Education

Imperial College London – 2018-2019

M.Sc. Advanced Computational Methods for Aeronautics, Flow Management and Fluid-Solid Interaction - Distinction (Projected)

Dissertation: Characterisation of flows behind bluff bodies using Lyapunov Exponents and vectors.

Relevant Modules: CFD, Computational Linear Algebra, Compressible Flow, FEM, HPC, Separated Flows and Fluid-Structure Interaction, NS Equations and Turbulence Modelling, Control Theory, Flow Control, Structural Dynamics, Hydrodynamic Stability, Fluid Mechanics.

University of Malta – 2014-2018

B.Sc. (Hons.) Chemistry and Physics - First Class Honours

Dissertation: Sea surface chemical dispersion with the Grand Harbour.

Relevant Modules: Nuclear & Atomic Physics, Quantum Physics, Signal Processing, Remote Sensing, University level Calculus Mathematics and Vector Analysis, Fluid Mechanics, Science of the Ocean Floor, Optics, Solid State Physics, Statistical Mechanics, Thermodynamics, Electromagnetism; Organic, Inorganic, Analytical, Environmental and Physical Chemistry, Polymers, Molecular Modelling, Organic Spectroscopy.

St. Aloysius College Sixth Form – 2012-2014

A level: Physics (A), Pure Mathematics (B), Chemistry (B).

Intermediate level: English, Philosophy, SOK, Technical Drawing and Graphical Communication.

*Additional
Experience*

- Four years of working in a fast-paced catering business - communication, team work and exposure to clients are all assets attributed from the job.
- Voluntary experience with a local teenage agency that included 3 months of 1-on-1 tutoring in Physics.
- Freelance projects for clients, working with HTML, CSS and Javascript.

Technical Skills

2+ years hands-on experience with AWS, holding Cloud Practitioner and seeking Solutions Architect Associate certification. 1+ years experience working with Retool. Experienced with Machine Learning tools to compliment various projects. Highly capable using computational tool such as ANSYS ICEM-CFD/FLUENT, CST Studio, COMSOL Multiphysics, Adobe Photoshop and Final Cut Pro.

Computing Skills

Fluent in a variety of languages including Python, SQL, Javascript, NodeJS (Typescript), React, C/C++, FORTRAN, MATLAB, HTML, CSS and bash scripting. Proficient with Microsoft Office (ECDL certification).

Languages

English - Native
Maltese - Native
German - B1 level.

Responsibilities

Masters Student Rep., Dep. of Aeronautics, Imperial College London

- Liaised with academic staff to ensure feedback from an internationally diverse cohort.
- Ensured that the cohort was well represented by creating a Facebook group and coordinating all academic matters via mainstream sources.

Operations Director, ThinkSync, a Young Enterprise company (2013)

- Lead all operations related tasks within the Company.
- Coordinated with Managing Director and Sales Director to promote product sales.

Achievements

- Formed part of the STEAM Experiments team that aimed to promote scientific learning at a primary level [www.steamexperiments.com].
- Obtained the Gold Award in the President's (Duke of Edinburgh) Award.
- Valid Driver's licence.

References available upon request