Raffaele Rainone

Curriculum Vitae

Portsmouth, UK

☐ raff.rain@yahoo.it

☐ raffo85h.github.io

GitHub

Personal Information

Date of Birth

December 12, 1985

Place of Birth

Battipaglia (SA), ITALY

Citizienship

Italian

Languages

Italian (mother tongue), English (fluent)

Professional Career

Jan 2016 – now

Data Scientist, Flight Data Services Ltd., Fareham UK.

Jan 2015 – Nov 2015 RF/DSP Developer, **Path Intelligence Ltd.**, Portsmouth UK. • Python, C++ developer.

- Code review of other developers using tools such as Phabricator and Arcanist.
- Worked on WiFi location algorithm, which translates raw data collected by units' WiFiscan into location analytics. Tasks included bug fixing, optimisation of existing code, developing new features, adding unit tests, analysing WiFi data in order to improve existing Bayesian Model.
- Designed and developed a full automated testing and provisioning system for QA of units - mainly developed in Python, along with the development of GNURadio blocks in C++.
- Designed and developed tests to assess the behaviour of WiFi scan of units, in order to gain a better understanding of how to interpret the data collected.
- Constant interfacing with Data Science team to share discoveries on units WiFi-related research.

Oct 2010 – Jan 2014

Graduate teaching assistant and Instructor. University of Southampton, UK

KEY SKILLS

I am a technology enthusiast with an analytical mind and a strong problem solving attitude.

I can learn new concepts and tools extremely quickly. In fact, I am willing to learn and to expand my knowledge of programming languages to develop clean, robust and scalable code.

I can work on several projects at the same time and I possess good time management skills, e.g. I can easily reorganize my work prioritizing new tasks.

IT SKILLS

Operating Systems: *Windows, MacOS* (7 years of experience), *Linux* (6 years of experience).

Script: Bash.

Programming Languages: *Python* & C++ (working knowledge), *Fortran* 77 (several projects delivered for undergraduate exams), *JavaScript* (1 year of experience), *Objective-C* (2 months experience), *MatLab* & GAP (3 years of experience - used during the PhD).

Markup Languages: HTML and CSS (1 year of experience), LATEX (working knowledge: theses, reports, articles, presentations; 7+ years of experience).

Others: Mathematica (4 years of experience).

ACADEMIC CAREER

Oct. 2010 - Ph.D. Mathematics, EPSRC Doctoral Training Award, University of Southampton, UK.

Mar. 2014 Thesis: "Geometric actions of classical algebraic groups", supervisor: Dr. T. C. Burness.

Sep. 2009 - 2nd year M.Math. International Master ALGANT (European grant), Mathematisch

Jul. 2010 Instituut, Universiteit Leiden, The Netherlands.

THESIS: "On the inverse problem for deformation rings of representations", supervisor: Prof. B. De Smit.

Oct. 2008 - 1st year M.Math. International Master ALGANT, Dipartimento di Matematica Pura e

Jul. 2009 *Applicata*, Università di Padova, Italy.

Oct. 2004 - B.MathSc., grade 110/110 cum laude, Dipartimento di Matematica e Applicazioni, Uni-

Mar. 2008 versità di Napoli "Federico II", Italy.

2004 **High school degree (equivalent to GCSEs and A-levels)**, Liceo Scientifico "E.Medi", grade 89/100, Battipaglia (SA), Italy.

COMMUNICATION AND INTERPERSONAL SKILLS

Able to explain complex ideas to non-technical people, ability to calibrate a talk to suit the audience.

Several conferences attended

Several international conferences attended in the period 2009 - 2013 (e.g. France, Israel, Italy, The Netherlands, UK). In most of these meetings **I delivered a talk**.

Teaching experience

Graduate Teaching Assistant/Instructor at University of Southampton (2010–2014): several tutorials classes (both elementary and advanced courses). Responsibilities comprised:

o answering students' questions related to the taught module;

o marking weekly exercise sheets and class tests;

o providing feedback on assessed work.

AWARDS AND OTHER ACTIVITIES

Mathematics During the secondary school (2001–04), I took part to the "Campionati internazionali di giochi matematici". I reached the **National Final** in the years 2003 and 2004.

Awards and scholarship Academic prize for high grades average 2005 and 2006. ALGANT scholarship 2009. EPSRC Doctoral Training Award 2010/13.

Music I studied and I can play (with a range of skills) violin, guitar and ukulele.

Strategy Games I like all sort of turn-based strategy games and chess.

Poker In tandem with my postgraduate studies, I played online poker in the period 2009-11.

Travel I love traveling, explore new places and discover new cultures. I have had the opportunity to visit several countries: Belgium, Croatia, England, France, Israel, Netherlands, Scotland, Slovenia, Spain, Switzerland, Tunisia.

REFERENCES

Available upon request.