Diego Russo | Principal Software Engineer

Cambridge, UK

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🐙 diegorusso • Updated on March 10, 2024

Proactive, innovative software development/engineering professional with over 17 years' expertise leading multiple global teams on technical projects aimed at software/application improvement, system enhancement, and process automation. Excellent cross-functional communicator and motivational team leader with proven success delivering solutions in alignment with business and stakeholder requirements. Highly motivated towards applying diverse experience in machine learning, product-driven environments as well as Open Source projects. Adept at leveraging knowledge and experience in Python, software design, deployment, and technical support to improve business processes and drive operational excellence. Value-added skills in staff training, client/partner relationship management, compliance/design standard management, troubleshooting, presentation, Python, and Linux.

Career Experience

CE-SW Runtimes, Arm Ltd., Cambridge, UK   **2023–present**
Principal Software Engineer
Technical Scope: Tech Lead, CPython.
After a successful 6 months secondment, I'm joining the Runtimes team to continue the work I started with CPython. I will be engaging more with upstream community and bring my expertise to make CPython and its ecosystem work flawlessly for developers around the world on Arm platforms.

CE-SW Runtimes (6 months secondment), Arm Ltd., Cambridge, UK   **2023**
Principal Software Engineer
Technical Scope: Tech Lead, CPython.
As part of the secondment programme, I spent six months in the CE-SW Runtimes team looking at the status of CPython (and its ecosystem) on Arm platforms. I've engaging with Arm's partners and the upstream community in order to address potential gaps.
- I presented at EuroPython 2023: "Python on Arm architecture"

ML Group, Arm Ltd., Cambridge, UK   **2020–2023**
Principal Software Engineer/Staff Software Engineer
Technical Scope: Tech Lead, Python, Machine Learning, IP Evaluation, Inference Advisor, Software Quality.
Act as lead for Arm ML Inference Advisor project while coordinating technical operations and communications between ML and Arm teams. Design, code, and debug software. Identify areas for software improvements and implement fixes. Train personnel when required and ensure maintenance of existing software. Provide recommendations on technologies to boost productivity. Oversee technical projects and address software-related queries. Manage software performance and attend team meetings. Formulate solutions to current and potential issues. Previous project: IP Selection Sandbox for ML.
- Help AI/ML developers to tailor and optimise their ML models to run well on Arm hardware: `https://pypi.org/project/mlia/`
- Enabled client's opportunity to evaluate right IP for ML workloads.
- Established and grew Python Guild to over 700 members.

ISG, Arm Ltd., Cambridge, UK   **2017–2019**
Staff Software Engineer
Technical Scope: Jenkins/Pipelines, LAVA, Artifactory, Docker, Python, Bash, Linux, GitHub.
Led build, test, data representation, and validation automation infrastructure for company product. Liaised with multiple global teams and external partners. Monitored product development life cycle and outlined product requirements. Developed engineering system documents and design software. Provided detailed design specifications outlining functional requirements and architectural constraints. Implemented efficient coding practices and resolved software defects. Reviewed product specifications, system design, and protocol specifications. Reported on projects and issues. Contributed towards process improvement.
- Designed automated build and test infrastructure from scratch on real Cortex-A boards for custom Linux distribution.

DSG, Arm Ltd., Cambridge, UK   **2013–2017**
Staff Software Engineer
Technical Scope: Python, flask, bootstrap, AngularJS, MongoDB, Linux, svn/Git
Supervised and led eight-member team while managing Arm Compilerand OSS toolchains automation infrastructures. Ensured compliance with design principles while sharing knowledge, processes, and technologies with various teams. Hosted monthly forum to address stakeholder requirements. Acted as business representative on DSG infrastructures.
- Collaborated with GNU team on delivery of optimised GNU toolchain for Arm processors.
- Drove development of infrastructure for automated builds, tests, and benchmarks.
- Created application for triaging GCC test results, storing results in database in order for analysis and identification of root causes, patterns, trends, and automation of issue tracking using Jira.

Engineering IT, Arm Ltd., Cambridge, UK   **2011–2013**
Senior Software Engineer

Technical Scope: Python, MongoDB, RabbitMQ, Java, Jira, LSF, Perl, C, tcsh, bash, Linux, svn/Git

Contributed to multiple internal projects, including development of fault tolerant application which interacted with LFS cluster and AMQ server. Developed Jira plug-in aimed at interacting with internal software to enable synchronization of external and internal tickets. Maintained and enhanced internal IT systems.

o Planned and executed IT Early Career Scheme aimed at recruiting interns and graduates.

R&D, Forinicom Srl, Bastia Umbra, IT   **2008–2011**

Software/System Engineer

Technical Scope: Python/Django, PostgreSQL, Debian, XEN, PyQT, Git

Delivered innovative product in collaboration with research and development team. Executed operations on embedded systems which included OS/software customisation for authentication management. Developed solution aimed at managing hotspots. Created captive portal for management of authentication, sign up, session logs, remote device signals, and integration with management software. Designed software for network monitoring.

o Set up internet connection and enabled fast connectivity for rural areas, providing services to hundreds of clients.

o Designed and implemented hotspot system with captive portal and credit card payments for numerous tourists; used at EuroPython 2011.

Consorzio Miles, Servizi Integrati, Rome/Assisi, IT   **2006–2008**

Python/Django Engineer

Technical Scope: Python/Django, PostgreSQL, Linux

Delivered in collaboration with a team the replacement of paper-based manual processes with automated/digital processes. Maintained project in VB and led migration to Python/Django which enabled citizens to follow and update processes online and interact in real time with municipality.

Additional Experience

Opentaste Ltd., Global   **2013–2015**
Software Engineer, **Technical Scope**: *Technical advisor, code review, Python, Flask, MongoDB*   *Remote, spare time project*

Forinicom Srl., Bastia Umbra, IT   **2011–05 / 2011–06**
Objective-C Engineer, **Technical Scope**: *Hotspot Captive Portal app, used at Europython 2011 in Florence*   *Contract*

Exion Sagl, Manno, CH   **2010–11/2011–01**
Python Engineer, **Technical Scope**: *Python, Django, PostgreSQL*   *Remote, Contract*

Sauce Labs Inc., San Francisco, USA   **2010–10/2011–01**
Python Engineer, **Technical Scope**: *Python, Pylons, GitHub*   *Remote, Contract*

Wedoit Sas., Assisi, IT   **2005–11 / 2006–05**
SEO Engineer, **Technical Scope**: *SEO, Python, PHP*   *Internship*

Education

Master of Science in Computer Science (Security) IT: 110/110 cum laude — UK: First class honours   **2021**
University of Perugia, Perugia, IT
Thesis: Pruning layers of a neural network with a heuristic-based approach.

Bachelor of Science in Computer Science (Networking) IT: 102/110 — UK: 2:1   **2006**
University of Perugia, Perugia, IT
Thesis: Wireless Broadband Network/WeConnect project

Accountant programmer Diploma (Mercurio project) IT: 85/100 — UK: A   **2002**
Ministry of Public Education, Commercial Technical Institute, Federico Cesi, Terni, IT

Professional Training

Expert Product Development with Python   **2022**
Arm Ltd., Cambridge, UK   *Doulos*

Advanced Python Training   **2022**
Arm Ltd., Cambridge, UK   *Learning Tree*

C++ Programming for Embedded Systems   **2021**
Arm Ltd., Cambridge, UK   *Doulos*

Practical Deep Learning   **2020**
Arm Ltd., Cambridge, UK   *Doulos*

iPhone (iOS9) and Swift 2.2: DipMatBeacon   **2016**
University of Perugia, Perugia, IT, App used to check the booking state of university rooms   *Udemy*

MongoDB Administration and Developers training   **2015**
Arm Ltd., Cambridge, UK   *MongoDB*

Cryptography 1   **2014**
Online   *Coursera*

ITIL Foundation   **2013**
Arm Ltd., Cambridge, UK   *ILX Group*

iPhone (iOS4) and Objective-C   **2011**
University of Perugia, Perugia, IT, Customised existent VOIP app

Licenses

Radio-amateur class A license (Nr. 020122/AN)/ International callsign IZ0OVB – C.I.S.A.R. Foligno's section – 2007

Affiliations

Publication: The AES implementation based on OpenCL for multi/many core architecture   *ICCSA 2010, Sangyo Uni., Fukuoka, JP*
EuroPython Conference: Volunteer/Attendee, Florence, Berlin, Bilbao, Rimini, Edinburgh, Online   *2011 – Present*

Languages

Italian: Fluent   *Italian citizenship*
English: C1   *British citizenship*
Spanish: C1

Proudly written in LATEX and Vim: https://github.com/diegorusso/cv