

# Lorenzo Bolla - Curriculum Vitæ

E<sup>M</sup>ail | Git<sup>H</sup>ub | Stack<sup>O</sup>verflow | Link<sup>e</sup>dIn | We<sup>b</sup>site  
*More detailed CV available here.*

## Experience

### **Google, SRE, Zurich CH, Mar 2022 – now**

Automating myself out of a job.

### **Roche, Linux Software and Hardware Expert, Zurich CH, Dec 2020 – Feb 2022**

Design, implement and maintain Debian-based operating system and infrastructure for diagnostic medical instruments. Involved in all stages of software development, from feasibility through design, development, testing, to maintenance. Deep experience with Debian-based operating system, packaging and software practices. Broad experience with DevOps practices, writing CI pipelines, testing across various hardware. Maintainer of Aptly.

### **YouGov, Senior Software Developer, London UK, Aug 2013 – Dec 2020**

Design and implement scalable analysis software for market research analysis using Python, Rust, Cython, MongoDB, PostgreSQL. Development of an in-memory column-oriented distributed DB to efficiently store and query tabular data. Lead junior developers, ensure best practices and code quality, automate deployments and continuous delivery.

### **YouGov, Director of DevOps, London UK, Aug 2015 – Jun 2020**

Lead the DevOps team, to improve automation of development processes. Manage the migration from legacy to state-of-the-art infrastructure, based

on GitLabCI, Docker and Kubernetes. Responsibilities include soliciting project ideas, setting priorities and scheduling projects. 25% time position dedicated to this role; remaining 75% Lead Python Developer.

**RAID Research Services LLP, Senior Software Architect, London UK, May 2012 – Aug 2013**

Design and implement scalable analysis software for finance using mainly Python, Pandas, MySQL and ExtJS. Implementation of an in-memory DB to efficiently query tabular data. Parsing of unstructured data sources and categorization using simple machine learning techniques.

**Artirix Ltd, Senior Software Engineer, London UK, Apr 2012 – May 2012**

Design and implementation of highly scalable web search crawlers using Python and Twisted.

**Zugo Ltd, Senior Python Developer, London UK, Apr 2011 – Apr 2012**

Develop massively scalable web applications (using Python, Tornado, MySQL, MongoDB, nginx on the back-end and HTML, Javascript, CSS on the front-end). Experience in distributed data analysis using MapReduce frameworks (mainly Disco), NoSQL data stores (mainly MongoDB) and AWS solutions.

**Geneity Ltd, Software Engineer, London UK, Aug 2008 – Apr 2011**

Software engineer of high-performance E-gaming web applications (mainly working with Betfair, Coral, Ladbrokes and others betting companies). Focus on high performance fund transfers.

**Previous jobs**

- Pirelli & C SpA, Optical Designer, Milano IT, Jun 2005 – Aug 2008
- TELE System Electronic Srl, Software Engineer, Vicenza IT, Mar 2005 – Jun 2005
- Photon Design Ltd, Software Engineer, Oxford UK, Apr 2003 – Apr 2004

- Progetto Mantegna, Technical Support, Padova IT, May 2001 – Apr 2003

## **Education**

### **University of Udine - Italy, PhD, Nov 2002 – Nov 2005**

Thesis on the numerical solution Maxwell equations in periodic dielectric devices.

### **University of Padova - Italy, Telecommunication Engineering, Sep 1996 - Mar 2002**

## **Publications**

Author of "Numerical Methods for Integrated Optics", ISBN 978-3-639-51669-2.

Technical reviewer of 3 more books on computer programming.

Author or Co-author of 10+ articles on peer-reviewed journals.

Author or Co-author of 10 international patents in the field of integrated optics.