# Andrea Lattuada

#### Education

2008–2012 Corso di Laurea in Ingegneria Informatica (Bachelor's Degree in Computer Engineering), Politecnico di Milano.

2013–July 2016 Master's Degree in Computer Science - Distributed Systems Track, ETH Zurich, GPA 5.63/6.00 (cohort avg. 5.34, stddev. 0.26).

February PhD Student and Research Assistant, Systems Group, Dept. of Computer Science, 2017-Current ETH Zurich.

## Industry Experience

2008–2010 **R&D Collaborator** - .**NET Developer**, *Omnilab S.r.l.*, Milan.

Maintained and redesigned the custom internal CRM and task-tracking system.

2009–2013 **Web Developer**, *Freelancing activity*.

Developed web applications and web sites for various small to medium-sized local businesses.

Oct 2010 – **Site Reliability Engineering Intern**, *Google Switzerland GmbH*, Zurich, Switzerland. Built a statistical data-mining tool for one of Google's storage teams responsible for large-scale backup and archiving.

Sep 2012— **Engineering Intern on the Core Server Team**, 10gen, Inc. (now MongoDB, Inc.), Nov 2012 New York, NY.

Built database server commands and tools to visualize the record layout in MongoDB's data files and some bucket usage statistics for the index btrees.

Aug 2013- Software Engineer Intern on the Production Engineering - Cache team, Facebook, Nov 2013 Inc., Menlo Park, CA.

Built and productionized an automated tool to progressively resize a *memcache* cluster (add or remove machines) while monitoring the cluster's health, key client metrics, and the load on backend services.

2013–2016 **Co-Founder, Software Engineer**, *buildo*, Milan, Italy.

Founded a consultancy company focusing on providing technical advice and software design and development services to startups and enterprises. As a founding partner, tackled both the technical and enterprenurial challenges of the company's growth.

- · Worked on the design and implementation of open-source foundational libraries, and coordinated various cross-project efforts;
- · designed and productionized a PaaS-based, container-based deployment infrastructure;
- · made critical contributions to the company's development practice by advocating peer review, CI, DevOps, and monitoring;
- $\cdot$  interviewed and selected the first employees and collaborators; set up the hiring process.

#### **Publications**

Programmable scheduling in a stream processing system, ETH Zurich. Master Thesis

Faucet: a user-level, modular technique for flow control in dataflow en-Short paper gines, A. Lattuada, F. McSherry, Z. Chotia, Proceedings of the 3rd ACM SIGMOD Workshop on Algorithms and Systems for MapReduce and Beyond (BeyondMR '16),

http://dx.doi.org/10.1145/2926534.2926544.

Differential durability: fault-tolerant distributed differential computation , A. Lattuada, V. Kalavri, M. Hoffman, F. McSherry, Eurosys 2017, Poster session.

SnailTrail: Online Bottleneck Detection for your Dataflow, R. Sager, J. Liagouris, D. Dimitrova, A. Lattuada, V. Kalavri, Z. Chothia, M. Hoffmann, T. Roscoe, Eurosys 2017, Poster session.

#### **Talks**

May 2015 Building startups on Scala, Scala Italy conference, Milan, Italy.

November 2015 How a Promise can get you out of callback hell, MilanoJS meetup, Milan, Italy.

March 2017 Papers we love: Zürich - Naiad: A timely dataflow system, Papers we love, Zürich, Switzerland.

April 2017 **Typeclasses – A type system construct**, *Scalar conf*, Warsaw, Poland.

## Languages

English Level C2 (CEFR) Italian

Native speaker

August 21, 2017

Cambridge English: Proficiency (2013)