# Jonnahtan Saltarin

# CS PhD student at University of Bern

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- $\circ$  Experince with C/C++, Java and Python, as well as networking protocols like TCP/IP.
- Interested in content delivery, artificial intelligence and data science.

### Education

### 09.2013 - Present **PhD, Computer Science**.

University of Bern, Switzerland

- Working on content delivery in content-centric networking with Prof. Torsten Braun
- Expected graduation: Fall 2017

### 09.2008 - 04.2011 MSc, Computer Networks Engineering.

Polytechnic University of Turin, Italy

- Master thesis at EPFL, Switzerland, with Prof. Pascal Frossard and Prof. Gabriella Olmo
- GPA: 108/110

### 09.2003 - 08.2009 BSc, Electrical Engineering.

Central University of Venezuela, Venezuela

- Double degree program with Polytechnic University of Turin, Italy.
- I graduated in the top 5% of my class, with a GPA of 16/20

# Experience

### 09.2013 - Present Research assistant.

University of Bern, Switzerland

- Research areas: networking, content delivery, caching, multimedia
- Developed a networking architecture that improves content retrieval in content-centric networks, using network coding (see [1, 2]).
- Currently working on caching strategies for multimedia delivery.
- Software development mostly with **C**, **C++** and **Python**.
- I am the webmaster of our research group (website).

### 01.2012 - 09.2013 **Software Engineer/Research Assistant**.

COPElabs, University Lusófona, Portugal

- Developed the MTracker Android application that keeps track of Wi-Fi connections, using Java.
- Developed a C++ application to test standardized communication over TCP/IP between intelligent transportation system devices (NTCIP standard).

### 09.2011 - 01.2012 **Software Engineering Intern**.

Fiat SpA, Italy

- Developed a .NET application to improve supplier's information management at Fiat's supplier quality department, using C#, SQL, HTML and JavaScript.

01.2011 - 05.2011 **Software Engineering Intern**.

Swiss Federal Institute of Technology in Lausanne (EPFL), Switzerland

- Developed a system for analysis and fusion of social and sensor data, using **Java**, **Hadoop** and data gathered through Twitter's and Weather Underground's web **APIs** (see [3]).

04.2010 - 12.2010 Master Thesis Intern.

Swiss Federal Institute of Technology in Lausanne (EPFL), Switzerland

- Developed a protocol for realtime media streaming over P2P networks, using **C++** (see [4]).

### Technical skills

Programming C/C++, Python, Java, SQL, C#, bash.

Networking TCP/IP, Wireshark, network simulator NS3.

Web HTML, JavaScript, jQuery, CSS.

Frameworks Hadoop, Microsoft .NET.

## Languages

Spanish Mother tongue (D)

English Fluent (C1).

Italian Intermediate Level (B2).

French Intermediate Level (B1).

Portuguese Intermediate Level (B1).

### Other activities

09.2016 - Present **Deep Learning Class**, Online.

Standford's CS231n: Convolutional Neural Networks for Visual Recognition.

02.2008 - 04.2008 Volunteer Experience, Venezuela.

Teaching basic computer classes to third-age people.

### **Publications**

- [1] Jonnahtan Saltarin, Eirina Bourtsoulatze, Nikolaos Thomos, and Torsten Braun. NetCodCCN: a Network Coding approach for Content Centric Networks. In *IEEE International Conference on Computer Communications (INFOCOM)*, April 2016.
- [2] Eirina Bourtsoulatze, Nikolaos Thomos, Jonnahtan Saltarin, and Torsten Braun. Content-Aware Delivery of Scalable Video in Network Coding Enabled Named Data Networks. *CoRR*, abs/1510.06659, September 2015.
- [3] Surrender Yerva, Jonnahtan Saltarin, Hojoung Jeung, and Karl Aberer. Social and Sensor Data Fusion in the Cloud. In *IEEE International Conference on Mobile Data Management (MDM)*, July 2012.
- [4] Jonnahtan Saltarin, Nikolaos Thomos, Eirina Bourtsoulatze, and Pascal Frossard. P2P Video Streaming with Inter-session Network Coding. In *IEEE International Conference on Multimedia & Expo (ICME)*, July 2011.