

# SOURABH LAL



## Education

École polytechnique fédérale de Lausanne (EPFL), Switzerland

*M.Sc. in Computer Science with a specialization in Information Systems. Class of 2018.*

Courses include: Intelligent Agents, NLP, Machine Learning, Applied Data Analysis, Information Security and Privacy, HCI.

Carnegie Mellon University, USA

*Study abroad. GPA: 3.73/4.00.*

Courses include: Applied Computational Intelligence Lab, Creating Intelligent Robots, Mobile Robot Programming Lab.

Jacobs University Bremen, Germany

*B.Sc. in Computer Science. Class of 2015. GPA: 1.85 (1.00 is best, 5.00 is worst).*

Courses include: Machine Vision

## Experience

CERN 08/2016 - 01/2017

- Intern in the CERN Document Server team.
- Developed features for the new video player module Using Flask, Jinja2, Angular and PostgreSQL.
- Open source project.

Cleversoft GmbH 06/2014 - 07/2014

- Intern in the Java Engineering team.
- Worked on the development of the Infonds financial services web application.

Fraunhofer ITWM 06/2013 - 08/2013

- Intern in the Optimization department.
- Individually developed a library that pre-computes the non-convex solution space of pareto optimal solutions.
- Developed using C++, with the Boost UBLAS library and QHull.

## Awards

MLH Prime EU, London 2017 – JP Morgan Prize for Best Hack for Social Good

KairosHacks Barcelona 2015 – SkyScanner API prize.

jacobsHack! Winter 2014 - 3rd prize + USG sponsor prize.

Jacobs University - Merit based 10,000 Euro Scholarship per year (2012-2015)

## Skills

**Development:** Python, Django, Flask, Java, Android, HTML5, CSS3, JavaScript, C++, C

**Other:** Git, GitHub, LaTeX, CLI, Unix, Windows, Agile software development

## Leadership & Extracurriculars

GitHub Campus Expert, EPFL 06/2017 - present

Supporting the student community by providing workshops, talks, encouraging out-of-class projects and helping at events such as hackathons and tech conferences.

LauzHack Founder and Main Organizer 03/2016 - present

Founded EPFL's first global hackathon series. Main organizer of the 2016 event which had over 180 participants. Part of the organizing team in 2017, responsible for fundraising and participant communications.

University Student Government (USG) 10/2013 - 06/2015

Member of the Housing and Facilities Committee. From January 2015 onwards, chair of the committee.

## Projects

Event Detection in Twitter 02/2017 - 06/2017

- Individually implemented 4 different event detection algorithms using Python for the LSIR lab at EPFL.
- Evaluated performance by testing with Tweets about events.

abcPay 04/2017

- Cross-platform app developed at a hackathon in a team of 4 that enables parents to administer a child's daily allowance.
- Built using ionic, angular, typescript and node.js

DoctorBot 09/2016 - 10/2016

- Chatbot developed at a hackathon in a team of 3 that converses with a patient to give a medical diagnosis.
- Built using Flask, Heroku, and Messenger, Twilio and Infermedica APIs.

Distant Reading 100 years of Archivio Veneto 02/2016 - 05/2016

- Used Topic Modelling to distant run the entire run of a scholar journal (821 digitized articles)
- Developed in Python using Gensim and NLTK libraries.

Data Collection with CoBot 09/2014 - 12/2014

- Iteratively developed a path planning algorithm
- Enabled CoBot robots to opportunistically collect temperature and humidity data from less recently explored locations by maintaining historical maps of exploration.

Remindoor 09/2014 - 12/2014

- Android app that functions as a prototype for a smart door.
- Implemented features search as facial recognition, and a bot that can converse with visitors and the residents.