

# DANIEL BALLE

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## EDUCATION

### **Stanford University** 2018

Stanford, United States · [stanford.edu](http://stanford.edu) · Graduate Business School  
Zürich, Switzerland · [ethz.ch](http://ethz.ch) · Center for Algorithms, Discrete Mathematics and Optimization  
Master Thesis in Algorithmic Game Theory · Grade: 6.00/6

### **Swiss Federal Institute of Technology in Zurich** 2016 - 2018

Zürich, Switzerland · [ethz.ch](http://ethz.ch) · School of Computer Science  
Master of Science · GPA: 5.71/6

### **Carnegie Mellon University** 2014 - 2015

Pittsburgh, United States · [cmu.edu](http://cmu.edu) · School of Computer Science  
International Exchange Scholarship awarded by EPFL · GPA: 3.56/4

### **Swiss Federal Institute of Technology in Lausanne** 2012 - 2015

Lausanne, Switzerland · [epfl.ch](http://epfl.ch) · School of Computer Science  
Bachelor of Science · Class rank: 2<sup>nd</sup> of 150 students · GPA: 5.56/6

## PROFESSIONAL EXPERIENCE

### **Facebook Software Engineering Intern** *Fall 2017*

Menlo Park, United States · [facebook.com](http://facebook.com) · Core App Monetization  
· Improved B2P communication by introducing Lead Ad Forms into Messenger & Page Inbox

### **Yelp Backend Engineering Intern** *Winter & Spring 2016*

San Francisco, United States · [yelp.com](http://yelp.com) · ReaderX & Ads Backend Team  
· Created a collection service providing an interface for users to group and organize business-related items.  
· Migrated ad campaign management components to pagelets for performance and code structure improvements.

## ACADEMIC PROJECTS

### **x86 Unix Kernel** 2015

Carnegie Mellon University, Operating System Design and Implementation  
· Design and implementation of a Unix-like kernel for x86 Architecture  
· Multiple virtual memory address spaces via paging, preemptive multitasking, and important system calls

### **DPLL-Algorithm based SAT-Solver** 2014

Carnegie Mellon University, Computational Discrete Math  
· A solver for the boolean satisfiability problem based on the DPLL-Algorithm  
· Using pure elimination and unit propagation with a variety of branching heuristics

## PERSONAL PROJECTS

· Menubar app for shared Spotify sessions – NodeJS, Socket.io, AppleScript, Swift, nginx  
· Facebook Messenger bot for reminders – Flask, PostgreSQL

## SKILLS

*Coding* Python · C++ · C · Java · Scala · Javascript · React · Assembly · Django · Flask · NodeJS · PHP  
SQL · MongoDB · nginx · bash · VHDL · LaTeX

*Languages* German (native) · French (fluent) · English (fluent)