**EPFL** 

## DAMIEN ENGELS Enthusiastic Hacker

## **EDUCATION**

**Masters Degree in Computer Science** Swiss Federal Institute of Technology (EPFL) SEPT 2013-JULY 2016

GPA: 5.46 / 6.0

AUG 2012-MAY 2013 **Exchange Student** Carnegie Mellon University (CMU)

GPA: 3.77 / 4.0

SEPT 2010-JULY 2013 **Bachelor Degree in Computer Science** 

GPA: 5.63 / 6.0

## **WORK EXPERIENCE AND PROJECTS**

#### SEPT-DEC 2015

## **Code Performance Analysis Project**

Scalameter for ScalaJS

Working with a partner, we are tasked to work on the Scalameter DSL and integrate it to ScalaJS, the JAVASCRIPT IMPLEMENTATION OF THE SCALA COMPILER.

#### JUN-SEPT 2015

#### Microsoft



Software engineer internship — SharePoint Authentication and Authorization

RESPONSIBLE FOR COLLECTING AND DISPLAYING TELEMETRY ABOUT USER SCENARIOS IN THE CLOUD. DEVELOPED IN-TERNAL TOOLS TO FACILITATE CREATION AND DEPLOYMENTS OF MONITORS THAT TRACK THE SYSTEM'S HEALTH.

#### SEPT-DEC 2014

#### **EPFL DSLAB**

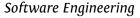


Improving C++ Virtual Calls Protection in the Code-Pointer Separation Mechanism

MASTER SEMESTER PROJECT. MODIFIED THE CLANG C++ COMPILER AND BUILT AN LLVM PASS THAT ALLOWS TO ENFORCE VALIDITY OF VIRTUAL TABLE POINTERS AT RUN-TIME WITH NO MEMORY ACCESS AND THUS VERY LOW OVERHEAD (1-5%)

#### AUG-SEPT 2014

#### SwissMediaPartners AG





RESPONSIBLE FOR THE DESIGN AND IMPLEMENTATION OF A WEB SERVICE. IMPLEMENTED THE REST API AND WEB ADMINISTRATIVE CONSOLE. USED AND GOT FAMILIAR WITH AN EXTENSIVE NUMBER OF WEB DEVELOPMENT TOOLS (PLAY FRAMEWORK, BOOTSTRAP, JAVASCRIPT, COFFEESCRIPT, LESS, SBT)

## FEB-JUL 2014

#### **Cisco Systems**



Symbolic Execution Based Testing

DESIGNED AND IMPLEMENTED TOOLS BASED ON THE S2E PLATFORM AND INTEGRATED THEM INTO CISCO'S TOOL CHAIN AND DEVELOPMENT PROCESS. MEASURED THE BENEFIT OF WHITE-BOX FUZZING FOR CISCO'S PRODUCTS. CONTRIBUTED TO THE S2E PLUGINS.

# JAN-MAY 2013

### **Operating Systems Project**

Carnegie Mellon

WORKED WITH A PARTNER TO CREATE A SMALL LINUX-LIKE KERNEL WITH VIRTUAL MEMORY AND PROCESS SCHEDULING. UNCOVERED CONCURRENCY AND MEMORY BUGS TO CREATE A ROBUST FINAL PRODUCT. MANAGED A LARGE CODE BASE University (9 KLOC) using Git.

## **TECHNICAL SKILLS & LANGUAGES**

PROGRAMMING SCALA, C, JAVA, C#, BASH, PYTHON, C++, JAVASCRIPT, LUA, PERL

FLUENT FRENCH, ENGLISH

SKILLS WEB DEVELOPMENT, SYSTEMS PROGRAMMING, COMPILERS,

BASIC ITALIAN, GERMAN

BIG DATA ANALYTICS, REACTIVE PROGRAMMING

## AWARDS

FEB. 2015 FIRST PLACE AT START UP WEEKEND LAUSANNE

SEPT. 2013 EXCELLENCE FELLOWSHIP FOR MASTER'S STUDIES AT EPFL

MAY 2013 DEAN'S LIST OF THE SCHOOL OF COMPUTER SCIENCE AT CARNEGIE MELLON UNIVERSITY

JULY 2010 MATHEMATICS AND APPLIED MATHEMATICS DISTINCTION AT GYMNASE DE NYON

#### EXTRA-CURRICULAR ACTIVITIES

MUSICBOT EXPLORATION OF WEB TECHNOLOGIES THROUGH EXPERIMENTATION.

(WORK IN PROGRESS) SCALAJS, WEBSOCKETS, ACTOR PROGRAMMING, PLAY FRAMEWORK, SPOTIFY'S APIS,

OAUTH2, MATERIALIZECSS, REACT.

STUDENT ASSISTANT INFORMATION, COMPUTATION, COMMUNICATION - COMPILER CONSTRUCTION

Information Science — Discrete Structures — Information technology project

ROWING CLUB D'AVIRON NYON (3RD PLACE IN 8+ JUNIOR AT THE SWISS CHAMPIONSHIPS)

CARNEGIE MELLON VARSITY CREW (2ND PLACE IN 4+ AT HE HEAD OF THE OHIO)

STUDENT COUNCIL MASTERS CLASS DELEGATE AND VICE-PRESIDENT OF CLIC

(ASSOCIATION DES ÉTUDIANTS EN INFORMATIQUE ET COMMUNICATIONS)

HC<sup>2</sup> Organization of one of Switzerland's largest algorithmic contests.

#### PERSONAL DATA

PLACE AND DATE OF BIRTH: MORGES, SWITZERLAND | 5 MAY 1992

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