in

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# DAMIEN ENGELS Enthusiastic Hacker

# **EDUCATION**

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

GPA: 5.51 / 6.0

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

GPA: 3.77 / 4.0

**Bachelor Degree in Computer Science EPFL** 2010-2013

GPA: 5.63 / 6.0

# **WORK EXPERIENCE AND PROJECTS**

JUN-SEPT 2015

#### Microsoft



Software engineer internship

SEPT-DEC 2014

#### EPFL DSLAB

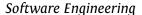


Improving C++ Virtual Calls Protection in the Code-Pointer Separation Mechanism

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

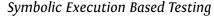




HELPED ON ALL LEVELS, FROM THE DECISION ON THE TOOLS USED TO THE INTERACTION WITH THE CLIENTS. IMPLE-MENTED SOME OF THE CORE PARTS OF ONE OF THE MAIN PROJECTS IN THE COMPANY. USED AND GOT FAMILIAR WITH AN EXTENSIVE NUMBER OF WEB DEVELOPMENT TOOLS (PLAY FRAMEWORK, BOOTSTRAP, JAVASCRIPT, COFFEESCRIPT, LESS, SBT)

FEB-JUL 2014

## **Cisco Systems**





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, BASH, PYTHON, C++, JAVASCRIPT, LUA, PERL SKILLS

WEB DEVELOPMENT, SYSTEMS PROGRAMMING, COMPILERS,

**BIG DATA ANALYTICS, REACTIVE PROGRAMMING** 

FLUENT FRENCH, ENGLISH BASIC ITALIAN, GERMAN

#### **AWARDS**

FEB. 2015 FIRST PLACE AT START UP WEEKEND LAUSANNE

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

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

**JULY 2010** MATHEMATICS AND APPLIED MATHEMATICS DISTINCTION AT GYMNASE DE NYON

# **EXTRA-CURRICULAR ACTIVITIES**

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 contest.

### RELEVANT CLASSES

OPERATING SYSTEM DESIGN AND IMPLEMENTATION (CARNEGIE MELLON UNIVERSITY)

- DATABASES APPLICATIONS (CARNEGIE MELLON UNIVERSITY)
- FOUNDATIONS OF SOFTWARE ENGINEERING (CARNEGIE MELLON UNIVERSITY)
- GRAPH THEORY (CARNEGIE MELLON UNIVERSITY)
- ALGORITHMS (SWISS FEDERAL INSTITUTE OF TECHNOLOGY)
- COMPILER CONSTRUCTION (SWISS FEDERAL INSTITUTE OF TECHNOLOGY)
- DISTRIBUTED ALGORITHMS (SWISS FEDERAL INSTITUTE OF TECHNOLOGY)
- CRYPTOGRAPHY AND SECURITY (SWISS FEDERAL INSTITUTE OF TECHNOLOGY)

#### PERSONAL DATA

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

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