Damien ENGELS

Enthusiastic Hacker

EDUCATION

2013 - Present Masters Degree in Computer Science

Swiss Federal Institute of Technology (EPFL)

GPA: 5.51 / 6.0

2012 - 2013 Exchange Student

Carnegie Mellon University (CMU)

GPA: 3.77 / 4.0

2010 - 2013 Bachelor Degree in Computer Science

EPFL

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 runtime with no meomory access and thus very low overhead (1-5%)

AUG - SEPT 2014

SwissMediaPartners AG

Software Engineering



Helped on all levels, from the decision on the tools used to the interaction with the clients. Implemented some of the core parts of one of the main projects in the company. Used and got familiar with an extensive number of web developpement tools (play framework, bootstrap, javascript, coffescript, 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 toolchain and development process. Measured the benefit of white-box fuzzing for Cisco's products. Contributed to the S2E Plugins.

JAN - MAY 2013

Carnegie Mellon University

Operating Systems Project

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 codebase (9 KLOC) using Git.

TECHNICAL SKILLS & LANGUAGES

PROGRAMMING Scala, C, Java, bash, python, C++, javascript, lua, perl

SKILLS Web Developpment, Systems Programming, Compilers, Big

FLUENT French, English
BASIC Italian, German

Data Analytics, Reactive Programming

Awards

FEB. 2015 First place at Startup 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

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 Championshipsi)

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)

hc² 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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NATIONALITY: Swiss and South-African

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