# Corneliu-Claudiu Prodescu

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Nationality: Romania Date of Birth: 04/08/1990 Place of Birth: Bailesti, Romania

### Education

09/2012 to 06/2014 Jacobs University, Bremen, Germany

MSc in Computer Science.

09/2009 to 06/2012 Jacobs University, Bremen, Germany

BSc in Computer Science.

GPA: 1.13 (1.07 within major) on a scale from 1.00 (4.33, A+) to 5.00 (0.00, F).

09/2011 to 12/2011 Carnegie Mellon University, Pittsburgh, PA, USA

Exchange student in the Computer Science Department.

OPA: 4.0/4.0

09/2005 to 06/2009 Carol I National College, Craiova, Romania

Secondary education with emphasis on Mathematics and Computer Science.

GPA: 10.0/10.0

## Research and Teaching

08/2010 to 09/2014 KWARC research group, Jacobs University, Bremen

> KnoWledge Adaptation and Reasoning for Content research group. I was the main developer of the MathWebSearch project. MathWebSearch is a content-based search engine for mathematical formulae. It indexes mathematics represented as MathML. The code base includes C++, bash and NodeJS. We use LibXML, cURL, LevelDB, ICU unicode, and MicroHTTPd APIs. To see available demos, see http://search.mathweb.org/.

02/2012 to 06/2012 Teaching Assistant - 320202 Operating Systems, Jacobs University, Bremen

> Topics included basic computer architecture, system calls and interrupts, concurrency and synchronization, virtual memory, file systems and socket programming. The job implied creating original assignments, guiding students through solutions, as well as grading homeworks, quizzes and exams.

02/2012 to 06/2012 Teaching Assistant - 320232 Operating Systems Lab, Jacobs University, Bremen

> Topics included C programming in user space (multi-threading, signal handling, basic networking, memory allocator), as well as kernel space (simple virtual devices supporting concurrent I/O, both blocking and non-blocking). The job implied guiding students through lab assignments, as well as

grading homeworks and quizzes.

09/2010 to 06/2011 Teaching Assistant - 32010[12] General Computer Science, Jacobs University, Bremen

> Topics included Discrete Mathematics, functional programming, search algorithms, logic gates and Turing Machines. The job implied holding weekly tutorials, creating original problems, as well as

grading homeworks, quizzes and exams.

# Practical Experience

10/2014 to date Software Engineer at Twitter Inc., San Francisco, CA

Working in the Growth team.

06/2013 to 09/2013 Software Engineer Intern at Twitter Inc., San Francisco, CA Worked in the Growth team. I implemented a number of user interfaces to show user suggestions as a result of a follow action in the Android Twitter App. Other tasks included an analytics dashboard and the Hadoop pig logic which generated its data. Programming was done using Java Android, pig, JavaScript.

06/2012 to 09/2012

Software Engineer Intern at Facebook Inc., Palo Alto, CA

Worked in the TAO caching layer team. I implemented a server-side feature to invalidate a portion of the cache on a running host. Also, added a script which drives a full-tier invalidation adapting the speed based on various stats (like database iops, client timeouts). Next, I worked on a journal for asynchronous requests, a tool which detects stale type schema changes and unit test runtime optimizations. Most of the implementations used C, with some bash and PHP.

09/2011 to 12/2011

15-410 Operating System Design and Implementation, Carnegie Mellon, Pittsburgh The course taught software design concepts in the Operating Systems environment. The projects involved implementing an x86 stack crawler, an user-space threading library and an operating system with features like: multi-threading, dynamic process loading, memory protection, roundrobin scheduling and drivers for keyboard and video console. Programming was done in pairs using C and x86 assembly.

12/2010 to 07/2011

Research Assistant at DFKI, Bremen

06/2010 to 08/2010

Worked on packaging Hets - Heterogeneous Tool Set software for Ubuntu/Debian. The resulted packages are available on Launchpad in the Hets Ubuntu Repository. Other tasks included testing and patching the core implementation and developing scripts for nightly builds and auto-updates. The main development language was bash, along with some Haskell, C++, Java.

#### Extracurricular Activities

01/2011 to date

Computer Science Club, Jacobs University, Bremen

Vice-president of the Jacobs University Computer Science Club. Activities include organizing biweekly presentations, coding sessions, tutorials, as well as meetings with faculty, alumni and outside representatives.

09/2009 to 06/2011

Linux Club, Jacobs University, Bremen

Vice-president of the Linux Club. Started as a member in September 2009, experimenting with Linux and soon became proficient and started providing active support for installs and configuration. Also, developed some utility scripts for Jacobs specific needs (like VPN access and LDAP search in the students database). Familiar with most common distributions: Debian, Ubuntu/Kubuntu, ArchLinux, OpenSUSE

## Skills and Achievements

Languages: Romanian (native), English (fluent), German(basic), French (basic)

**Programming:** Proficiency in C

Good knowledge of C++, JAVA, bash/sh, Python, Assembly x86, MATLAB, Mathematica, SML,

Prolog

Basic knowledge of PHP, JavaScript, perl

Tools: Git, Subversion, GNU Make, CMake, Perforce Jam, IATEX

Awards: Member of President's List, Jacobs University, 2010 - 2012 (GPA range 1.0 - 1.5)

Member of Dean's List, Carnegie Mellon University, Fall 2011 (QPA range 4.0 - 3.75)

Medals at National Mathematical Olympiad (Gold: 2004, 2006, 2007 and Silver: 2005, 2008)

Silver medal - 14th Tuymaada Olympiad on Mathematics, Yakutsk, Russia (2007)

Gold medal - 2nd Zhautykov Olympiad on Mathematics, Alma Ata, Kazakhstan (2006)

Gold medal - the Junior Balkan Mathematics Olympiad, Veria, Greece (2005)

Interests: Programming, Mathematics, Table Tennis, Chess