

# Maximilian Bachl

curriculum vitæ

## General information

Day of birth 26.6.1992
Nationality Austrian
Place of birth Vienna

#### Education

From 9.2015 EIT Digital, second year, Université Pierre et Marie Curie, Paris.

9.2014–6.2015 EIT Digital, first year, University of Trento, Trento, Italy.

Average grade 28.5 of 30 points

10.2011 – Bachelor of Computer Science, Technische Universität Berlin, Berlin.

8.2014 Average grade of 1.8, Bachelor thesis on "Impact of Packet-Loss on Localization and Subjective Quality

in 3D-Telephone calls"

2002–2010 Gymnasium, GRG17 Geblergasse, Vienna.

Graduated in June 2010 with an average grade of 1.25

#### Experience

## Work experience

## 5.2013–5.2014 **Software Developer**, Fraunhofer Heinrich Hertz Institute, Berlin.

In the last year of my Bachelor studies I worked at Fraunhofer Heinrich Hertz Institute. In my department (Wireless Networks) we developed a software-based LTE implementation. My biggest tasks were to implement the demapper, descrambler and demodulator according to the LTE specifications. The demapper is the part that separates the big data stream that arrives from the mobile phone tower. I split up the control information and payload and analyzed it according to the LTE standard. The descrambler and demodulator converted the data to bits that could finally be interpreted. Also I developed a graphical front-end that plotted and visualized the extracted information.

I accomplished this task mainly using MATLAB and C.

# since 11.2012 **Self Employed**.

I worked for start-ups, doing mainly frontend development with Ruby on Rails and recent HTML5 technologies. Also I developed websites for private persons and small companies.

## 9.2012 Internship, ATOS, Vienna.

Development of various commandline utilities and graphical Programs for Windows, e.g. a graphical Task Manager written in Visual Basic .NET.

## 8.2011 Internship, OMV, Vienna.

Administration of databases and translation of technical manuals from German to English.

#### 8.2009 Internship, OMV, Vienna.

Development of an automated email software using Python and several other administrative activities.

#### Miscellaneous

#### 2013–2014 Board Member, AEGEE-Berlin e.V., Berlin.

AEGEE is the largest transnational, interdisciplinary student organization in Europe. It promotes an equal, democratic and unified Europe, open to all across national borders. I was in the board of the association in Berlin as the treasurer and organized several international events with up to 30 participants. These gatherings had a focus on cultural exchange and learning about other peoples in Europe.

#### 2010–2011 Civil Service, Jewish Community of Vienna, Vienna.

Support of holocaust survivors and scientific research activity in the archives

#### Languages

German First language

English C1 Level (TOEFL test 115/120 points)

French Basics Italian Basics

# Programming abilities

OS Windows, Linux, Mac OS X and Unix in General

Languages MATLAB, C, Ruby, Python, Java, JavaScript, Haskell, Assembly, Bash, Visual Basic

Web Experience with Ruby on Rails, Django and HTML5 and AJAX, CSS3 and CSS preprocessors. Also I have experience with the HTML5 virtual file system API and binary data in JavaScript as well as common programming interfaces like the Google Maps API. Furthermore I am experienced with Node.js.

Miscellaneous &TeX, MS Office, version control software like git and databases like MySQL, Postgres and Mon-

goDB.

Experience with mobile communications (GSM, UMTS and LTE) and also with the specific codecs and means of transmission. I learnt about mobile telephony at Fraunhofer HHI where I worked on the LTE specification and because of my Bachelor's thesis which I wrote at Deutsche Telekom.

## Hobbies

Sport Running, cycling, skiing, strength training

Others Programming, politics, philosophy, gardening, traveling