



Thomas Neff

*I have had my results for a long time: but I do not yet know
how I am to arrive at them - Carl Friedrich Gauss*

Education

- 2015– **Master of Science**, *Graz University of Technology, Graz, .*
Information and Computer Engineering
Major: Signal Processing and Speech Communication
Minor: Computer Vision and Graphics
○ Scholarship for academic excellence 2015/2016
- 2012–2015 **Bachelor of Science**, *Graz University of Technology, Graz, with distinction.*
Information and Computer Engineering (Telematik)
○ Scholarship for academic excellence 2012/2013
○ Scholarship for academic excellence 2014/2015
- 2007–2012 **Matura**, *HTBL u. VA BULME, Graz, with distinction.*
Hardware - Software - Co-Design with focus on Software Development

Bachelor thesis

- title *BugTracer: A Buffer Overflow and Memory Access Logging Tool*
- supervisors Dipl.-Ing. Johannes Winter
- description Buffer Overflow detection and visualization for C programs using LLVM compile passes, a run-time C library and a Python GDB script.

Experience

Vocational

2013– **Study Assistant**, *Graz University of Technology, Institute for Information Systems and Computer Media*, Graz.

Tutorials, assignment creation and correction for introductory courses in C and C++ programming for groups between 40 and 80 students. I was also partly responsible for the planning, revision and organisation of the contents of the tutorials in cooperation with the other study assistants.

- Einführung in die (strukturierte) Programmierung
- Softwareentwicklung Praktikum

2016 **Summer Intern**, *Graz University of Technology, Institute for Computer Graphics and Vision*, Graz.

Internship in the domain of medical image analysis using modern machine learning methods. I contributed to a tool which is used for online data-augmentation of medical image data using Caffe and the ITK image processing framework. I also explored Generative Adversarial Networks and their application in the medical imaging domain.

2010, 2009 **Summer Intern**, *AVL List GmbH*, Graz.

Implementation of a C# script for mass license creation from an SAP MS Excel sheet using .Net COM-Interop to improve the work-flow of the department.

Student Projects

2013 **Mobile Applications**, *Graz University of Technology*, Graz.

Project lead of the development of an iOS educational platforming game called Super1x1 in cooperation with 2 colleagues. My main responsibility was to create the concept as well as the main game engine and the music. Super1x1 was voted to be the best app created during the course by all students attending.

App Store: <https://itunes.apple.com/us/app/super-1x1/id664651808>

Awards

2015 **Pebble Timeline Challenge Winner with "Greeney's Run"**, *Pebble*, Palo Alto, California.

Implementation of a procedurally generated endless platforming game in C using the Pebble SDK for the Pebble Smartwatch. "Greeney's Run" was selected to be one of 12 international winners of the Pebble Timeline Challenge, for which I received a prize as well as an invitation to the Pebble Developer Retreat 2015 in San Francisco. Greeney's Run has been installed more than 4000 times so far.

Pebble App Store: https://apps.getpebble.com/en_US/application/554f9adb4e604b9ed3000071

Pebble Blog: <http://developer.getpebble.com/blog/2015/06/18/timeline-challenge-week-seven/>

GitHub: <https://github.com/thomasneff/GreeneyRun>

2011 **Invent a Chip - 3rd Place**, *University of Technology Vienna*, Vienna.

Implementation of a chip used to measure and control power usage inside a household.

Languages

German Native

✉ thomasneff93@gmail.com • [in thomasneff93](#) • [thomasneff93](#)
[thomasneff](#)

English Fluent (speaking, reading, writing)

Skills

Soft Skills Conflict Management, Group Dynamics

Programming and Scripting C, C++, C#, Objective C (iOS), MatLAB, CUDA, Python, Java, SQL, Pebble Smartwatch SDK

Machine Learning Caffe, Tensorflow

Engineering Image Processing, Signal Processing, Computer Graphics, Computer Vision, Linear Algebra, Calculus, Electrical Engineering, Electronics

Design Adobe Photoshop

Game Development Unity

Miscellaneous MS Office, \LaTeX , Audio Engineering

Interests

Challenge I love being challenged, and it's what drives me forward and helps me grow in all aspects.

Music As a guitarist, listening and creating music helps me relax and recover from rougher days.

Video Games Gaming is a passion for me, as there are so many different concepts to explore and to learn from. I also love developing games myself.