Lorenz Hofmann-Wellenhof

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EDUCATION

University of Passau

Passau, Germany October 2014 — Present

B. Sc. Mobile and Embedded Systems, M. Sc. Computer Science

- Grade: $1.8 \sim 3.2$ (GPA); expected graduation: January 2020
- Top 20% of 2017 graduation class
- Relevant coursework: Machine Learning, Algorithms and Data Structures, Agile Software Development, Computer Networks, Enterprise Software Architecture, Computer Architecture, Programming in Java, Mathematics in Technical Systems I-III, Computer Engineering

Stevens Institute of Technology

New York City, USA

August - December 2018

Education abroad in M. Sc. Computer Science

4.0 GPA; top 3 project in Machine Learning class

EXPERIENCE

University of Passau Remote

Graduate Researcher at the Chair of Data Science

July — December 2019

- Investigating the effects of variational autoencoders and adversarial examples with Professor Doctor Michael Granitzer; funded by the SCCH
- Making open-source contributions to the tensorflow (TF) library; Migrating adversarial attack methods (FGSM, PGM, SPSA) from TF 1 to TF 2
- Used technologies: Python, tensorflow, Keras

Google Summer of Code Remote

Google Summer of Code participant with API Client Tools at Google

May — August 2019 Implemented the open-source tool gnostic-grpc: A tool that converts OpenAPI descriptions into a description of a gRPC service that can be used to

- implement that API using gRPC-JSON Transcoding (mentored by Tim Burks and Noah Dietz, software engineers at Google) Improved feature completeness of gnostic by converting the compiled Protocol Buffer representation into equivalent types which are processable by plugins
- Wrote a medium blog post that explains how to set up a gRPC API with envoy given an OpenAPI description; accumulated over 200 monthly readers
- Representation of this work at the API specification conference in Vancouver by Tim Burks in his workshop
- Used technologies: Golang, Protocol Buffers, gRPC, OpenAPI, envoy

csneovias GmbH Passau, Germany

Software engineer (working student)

March 2016 — July 2018

- Designed and implemented student lifecycle management software for the University of Münster, University of Zurich, and the Goethe Institute; created fronted applications (course registry, courses overview) with my team using agile methodologies; built back end interfaces to provide applications with data
- Used technologies: JavaScript, ABAP, SAPUI5, OData protocol

PROJECTS

My Telegrams Graz, Austria

Creator

Creator

October 2017 - January 2019

- Created an Amazon Echo Skill that enables users to send and to listen to messages via the Telegram Messenger
- Built a web server to connect the Skill to the Telegram API: Set up a REST API with Django and MySQL database; added social authentication, progressive web app support, OAuth, implemented push notification via Firebase; used a Python wrapper to communicate with the Telegram API, and used AWS for deployment; accumulated over 1300 users; a video of the skill in action
- Used technologies: Python, TypeScript, HTML5, CSS, Sass, Django, MySQL, Angular, AWS

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Graz, Austria

Implemented a personal webpage with Angular to constitute my projects, thoughts, and world views

March 2018 — January 2019

Bing Bong

Graz, Austria February 2018 — July 2018

- Creator Launched a mathematical brain game as Amazon Echo Skill where users play against Alexa; accumulated over 3300 users
 - Used technologies: Python, DynamoDB, AWS

SKILLS

Languages & Technologies: Proficient in Python, Golang; familiar with TypeScript, JavaScript, NumPy, pandas, SQL, Protocol Buffers, worked with Git, AWS, Django, Angular, Keras, tensorflow, gRPC, Alexa Skills Kit SDK

ACTIVITIES & REWARDS

- Google Hash Code 2018: Rank 1545 out of 3012; Google kick start round B: Rank 1449 out of 2250
- Active member of the student council at the University of Passau: Representing the interests of the students of the faculty
- Volunteer at the TCS New York City Marathon: Handing out drinks to the runners and motivating them
- Google Summer of Code stipend: Awarded \$5400 stipend from Google
- AWS Promotional Credits for Alexa Skill developers: Monthly AWS costs of \$100 are covered