

Lorenz Hofmann-Wellenhof

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github.com/LorenzHW

EXPERIENCE

Senacor Technologies AG

Software Engineer

- Implemented several features from scratch for the B2B application of TeamBank
- Optimized and re-engineered existing codebase to improve quality of code and performance
- Used technologies: Java, JavaScript, Spring Boot, Angular, OpenShift

Berlin

since October 2020

University of Passau

Graduate Researcher at the Chair of Data Science

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

Remote

July — December 2019

Google Summer of Code

Google Summer of Code participant with API Client Tools at Google

- 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 1000 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

Remote

May — August 2019

csneovias GmbH

Software engineer (working student)

- Designed and built student lifecycle management software for the University of Münster and the University of Zurich:
 - Created mobile-first web applications and implemented backend endpoints to provide applications with data
 - Optimized and re-engineered existing codebase to improve documentation, quality of code and performance
- Implemented a voucher generation system for the Goethe-Institut from scratch
- Used technologies: JavaScript, ABAP, SAPUI5, OData protocol

Passau, Germany

March 2016 — July 2018

EDUCATION

University of Passau

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

- Grade: 1.8 ~ 3.2 (GPA)
- 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

Passau, Germany

October 2014 — February 2020

Stevens Institute of Technology

Education abroad in M. Sc. Computer Science

- 4.0 GPA; top 3 project in Machine Learning class

New York City, USA

August — December 2018

PROJECTS

bingosounds.com

Web developer

- Collaborated with event manager from Jägermeister and Law's Anatomy on a pro bono [online music bingo game](#), helping local bands during the COVID-19 pandemic; used technologies: Vue.js, GraphQL, Django, AWS Elastic Beanstalk

Graz, Austria

since May 2020

Telegram Connect

Creator

- Created an [open-source Amazon Echo Skill](#) that enables users to send and to listen to messages via the Telegram Messenger; accumulated 1300 users
- Built a web server to connect the Skill to the Telegram API: Set up a REST API with Django and MySQL database; a [video](#) of the skill in action
- Used technologies: Python, TypeScript, HTML5, CSS, Sass, Django, MySQL, DynamoDB, Angular, AWS Lambda, AWS Elastic Beanstalk

Graz, Austria

since June 2018

Number Stack

Creator

- Launched a mathematical brain game as [Amazon Echo Skill](#) where users compete against each other: accumulated over 180 users
- Used technologies: Python, DynamoDB, AWS Lambda

Graz, Austria

since March 2020

SKILLS

- **Languages & Technologies:** Python, Golang, Protocol Buffers, TypeScript/JavaScript, Java, HTML/CSS
- **Infrastructure:** AWS, Git, DynamoDB, MySQL, GraphQL, Docker, envoy
- **Frameworks:** Django, Spring Boot, Angular, Vue.js, Keras, tensorflow, gRPC, Alexa Skills Kit SDK, OpenAPI

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
- April 2019 30-Day LeetCode Challenge: Completed a data structure and algorithm problem every day for 30 days