

Lorenz Hofmann-Wellenhof

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elweo.io

github.com/LorenzHW

EDUCATION

University of Passau

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

Passau, Germany

October 2014 — February 2020

- 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

Stevens Institute of Technology

Education abroad in M. Sc. Computer Science

New York City, USA

August — December 2018

- 4.0 GPA; top 3 project in Machine Learning class

EXPERIENCE

University of Passau

Graduate Researcher at the Chair of Data Science

Remote

July — December 2019

- 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

Google Summer of Code

Google Summer of Code participant with API Client Tools at Google

Remote

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 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

csneovias GmbH

Software engineer (working student)

Passau, Germany

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

elweo.io

Creator

Graz, Austria

since October 2017

- Implemented and launched several voice apps:
 - [Only One](#): Developed a phone-connected, cooperative group game where users have the possibility to buy premium content; utilized Django channels and Amazon ElastiCache (Redis) for server to client communication; a [video](#) of the skill in action
 - [Number Stack](#): Launched a mathematical brain game as Amazon Echo Skill where users compete against each other; accumulated over [14000](#) monthly users; qualified for the Alexa Developer [Rewards](#) program due to the high user engagement
 - [My Telegrams](#): 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, and OAuth; used [Telethon](#) to communicate with the Telegram API and AWS Elastic Beanstalk for deployment; accumulated over 1300 users; a [video](#) of the skill in action
- Technologies: Python, TypeScript, HTML5, CSS, Sass, Django, MySQL, DynamoDB, Angular, Vue.js, GraphQL, AWS Lambda, AWS Elastic Beanstalk

bingosounds.com

Web developer

Graz, Austria

since May 2020

- Worked in cooperation with event manager at 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

SKILLS

- **Languages & Technologies:** Python, Golang, Protocol Buffers, TypeScript/Javascript, Java
- **Infrastructure:** Amazon AWS, Git, DynamoDB, MySQL, GraphQL, Docker, envoy
- **Frameworks:** Django, 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