

Johannes Innerbichler

Cloud Freelancer



"A man provided with paper, pencil, and rubber, and subject to strict discipline, is in effect an universal machine."

- Alan Turing -

Personal Details

Name	Johannes Simon Innerbichler
Email	j.innerbichler@gmail.com
Birth	17.06.1987
Citizenship	Austria
Web	https://www.johannesinnerbichler.com
GitHub	https://github.com/jinnerbichler

Studies

2013 to 2016 **Master Telematik**

Graz University of Technology, Rechbauerstraße 12, 8010 Graz
Focus: Computer Vision und Computational Intelligence
passed with distinction
Master's thesis: Cloud Storage Performance

2009 to 2013 **Bachelor Telematik**

Graz University of Technology, Rechbauerstraße 12, 8010 Graz
passed with distinction
Bachelor's thesis: Safe Implementation of AES

Timeline

- 2016 till now **IT Freelancer**, Cloud Applications with Microservices and Data Analytics
As a freelancer, I have developed several cloud applications based on the Microservice paradigm and a focus on data security. Additional projects dealt with data analytics using techniques from Machine Learning and Artificial Intelligence. An up-to-date list of reference projects and skills can be found on www.johannesinnerbichler.com.
- 2016 till 2018 **Salzburg Research**, Cloud focused IoT Researcher
During this time, I worked on a cloud platform called NIMBLE, which enabled small and medium-sized businesses to find new partners on the platform and augment advanced business processes.
- 2014 to 2016 **CrossCloud GmbH**, Co-Founder, CTO and Managing Director
CrossCloud is a client application for cloud storage, e.g. Dropbox or Google Drive, which enables companies to use multiple cloud storage services in a very easy and secure way. As co-founder and CTO of a startup, I led a team of five developers and learned how to create a product from the ground up. During my role as scrum master, I learned how to use resources efficiently. The founders of CrossCloud received the award of being Grazer of the year 2015 in the field of economy. Two investment rounds were closed and a FFG Basisprogramm was approved successfully.
www.crosscloud.me
- 2012 to 2014 **Freelancer**, App and Web Development
As a freelancer I developed several Groovy on Rails and HTML 5 applications.

IT Projects

NIMBLE Cloud Platform – Roles: Cloud Architecture Design and Lead Developer

Java	NIMBLE is marketed as the novel, federated approach for industry B2B cloud platforms. The platform was built according to the Microservice paradigm, which led to a very modular and flexible architecture. Spring Cloud (based on Spring Boot) provided the underlying framework for building the necessary cloud infrastructure. Docker was used as deployment target and Kubernetes utilised as the container-orchestration system in the cloud. I was mainly in charge of designing the Microservice architecture and guided the development of the platform as the lead developer. Additionally, I was in charge of the security components, which were realised using Keycloak and the OAuth2.0 / OpenID Connect standard. Angular was the applied front-end technology. The source code of the platform is available open source on GitHub. GitHub: https://github.com/nimble-platform
Maven	
Spring Cloud	
Kubernetes	
Helm	
Microservices	
Docker	
Jenkins	CrossCloud Client Application – Roles: CTO, Lead Developer and Scrum Master
Camunda	
Java	The first version of the client application was a desktop application written in Java and Groovy. Connections to different cloud storage services and the synchronization engine were executed on the Java Virtual Machine. By the end of 2015 we rewrote and refactored the entire application in Python. Mobile applications were developed using the Xamarin platform in order to reuse the business logic on iOS and Android. Server-side implementation was created using the Spring Framework.
Maven	
Spring Boot	
Groovy	
Python	
Flask	
NodeJS	

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Maven	
Spring Boot	
Groovy	
Python	
Flask	
NodeJS	

Cloud Storage Performance Analysis – Role: Developer

Java	My master thesis dealt with a global performance analysis of three of the most used cloud storage providers (i.e. Dropbox, Google Drive and OneDrive). Different regression models were used to find an optimal model of global bandwidths. A deep understanding of Multiple Linear Regression and Support Vector Machines has been developed within this project.
Python	
Django	
TensorFlow	

Neuronal Politician – Roles: Developer, Data Scientist and DevOps

Python	Speeches in the National Council of Austria are stenographically recorded and made available on data.gv.at. Recorded texts were used to train an artificial recurrent neural network, which uses the last 15 words to predict each 16th word. The source code is available on GitHub. GitHub: https://github.com/jinnerbichler/neural-politician-ai Website: http://neuronaler-politiker.com/
TensorFlow	
Keras	
Django	

Deep Learning Trading Agent – Roles: Data Scientist and DevOps

Python	With the help of a Convolutional Neural Nets (CNNs), we tried to make price predictions of cryptocurrencies (e.g. Bitcoin or Ethereum). The neural network was implemented with Google's Tensorflow and the higher abstraction library Keras. Past trades of the different currencies since 2013 were used as the underlying dataset. Later, a sentiment analysis of articles on Twitter was applied to further improve the prediction capabilities of the model. Next steps in this project will be a semantic classification of texts using Word Embeddings and an evaluation of Recurrent Neural Networks (RNN) for time series modeling.
TensorFlow	
Keras	

Safe Implementation of the AES-algorithm – Role: Developer

C	During my bachelor thesis I was securing an existing implementation of the Advanced Encryption Standard (AES) on an 8-bit microcontroller against side-channel attacks.
Assembler	

Additional Qualifications

IT-Knowledge

Programming Languages	Java / Python / JavaScript / Typescript / JSX
Libraries	Spring Boot / Spring Cloud / Spring Security / Bouncy Castle / Apache Kafka / ELK Stack / Tensorflow / Keras / scikit-learn / Numpy / NLKT / Spacy / Flask / Django / React / Angular 2-6
Software	Docker / Docker-compose / Kubernetes / PyCharm / IntelliJ / Maven / Jenkins / Travis CI / Keycloak / Git / GitHub / Gitlab / iPython /

Languages

German	mother tongue
English	fluent in spoken and written



The Cloud Native Computing Foundation hereby certifies that

Johannes Innerbichler
has successfully completed the program
requirements to be recognized as a

Certified Kubernetes Application Developer

A handwritten signature in black ink, appearing to read "Dan Kohn".

September 29, 2018

CKAD-1800-0193-0100

DAN KOHN, EXECUTIVE DIRECTOR
CLOUD NATIVE COMPUTING FOUNDATION

DATE OF COMPLETION

CERTIFICATE ID NUMBER