

## Professional Experience

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### Apple

Graduate Software Engineer – Data Science Team

Cork, Ireland  
Oct 2022 – present

- Collaborating with Software Engineers and business stakeholders to build full stack, MLOps data products for Apple's supply chain business
- Developing anomaly detection, time series forecasting and NLP tools for internal business stakeholders
- Conducting frequent meetings with internal business stakeholders to identify new AI opportunities for Apple's supply chain

Technologies: *Python, DataRobot, Streamlit, K8S, Docker, CI/CD, Snowflake, Teradata, S3, Keynote*

### Udacity

Data Science Career Coach for the "Bosch AI Talent Scholarship Program"

Remote, Germany  
Jul 2022 – Nov 2022

- Conducted weekly webinars to deliver careers and initial freelancing experience to Udacity learners
- Reviewed over **50** data science **PhD/Master** students' resumes and cover letters and provided feedback
- Helped students to identify their personal interests and career goals to land a data science job at Bosch

Technologies: *Powerpoint, Python, Zoom*

### Machine Learning and Data Analytics Lab @FAU

Student Assistant for the courses: *Machine Learning for Engineers 1 & 2*

Erlangen, Germany  
May 2022 – Aug 2022

- Answered Machine Learning related questions from students in the course forum
- Took part in course management, formulated exam questions and partly corrected the exam

Technologies: *Python, E-Learning Platform, PowerPoint, Kdenlive*

### Amazon

Business Intelligence Intern – Transportation Planning Team

Munich, Germany  
Feb 2021 – Aug 2021

- Translated SQL scripts for prediction into Python-based Machine Learning pipelines
- Built a multiple regression model to predict upcoming number of sales for sales contracts
- Optimized data retrieval SQL scripts from the Redshift cluster by reducing the complexity
- Minimized SQL script lengths by **>50%** to improve the readiness and computation time

Technologies: *Python, SQL, Pandas, Machine Learning, AWS, Redshift*

### Siemens AG

Machine Learning Engineer Working Student – IDE Development Team

Erlangen, Germany  
Mar 2020 – Feb 2021

- Built and deployed a XGBoost model with error log tickets from customer data
- Enabled our 130 software engineers a **~30%** faster ticket fixing pipeline with the prediction model

Technologies: *Python, XGBoost, Scikit-Learn, Flask, HTML, Bootstrap*

### Rehau AG

Software Engineering Working Student – Digital Innovations Team

Erlangen, Germany  
Apr 2019 – Aug 2019

- Built an automated Java-Applet to scrape data from IoT home devices used by our SE team
- Used Kali Linux to identify potential data leakages between the IoT-Devices and Wi-Fi routers

Technologies: *Java, Java Spring, Kali Linux, Wireshark*

### Tokyostay Ltd.

Full Stack Developer Intern - Growth Team

Tokyo, Japan  
Aug 2018 – Mar 2019

- Implemented an availability feature on the master branch of the Wordpress website
- Experimented to translate the Wordpress website of the companies' bar into a ReactJS website

Technologies: *Wordpress, PHP, HTML, CSS, ReactJS, NodeJS, Javascript*

# Education

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## Friedrich Alexander University of Erlangen-Nuremberg (FAU) Master of Computer Science

Erlangen, Germany  
Apr 2020 - July 2022

- **Major:** Artificial Intelligence and Machine Learning, **Minor:** AI in Medicine
- Courses: Deep Learning, Pattern Analysis, Machine Learning for Timeseries, Mathematical Data Science
- Thesis: *AI Trend Detection in Healthcare by applying Topic Clustering and Sentiment Analysis using Podcast Data*

## City University of Hong Kong Exchange Semester

Hong Kong  
Aug 2019 - Jan 2020

- Courses: Machine Learning, Data Engineering and Machine Learning for Business

## Nuremberg Institute of Technology Georg Simon Ohm Bachelor of Computer Science and Management

Nuremberg, Germany  
Oct 2016 - Apr 2020

- **Major:** Machine Learning, **Minor:** Database Systems
- Courses: Machine Learning, Data Engineering and Learning Systems, NoSQL Database Systems
- Thesis: *IT-based Automatic Text Summarization with the use of Textgeneration Methods*

# Projects

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## Master Project

Nov 2020 – Nov 2021

### *Style Classification in Posters*

- Scraped 20GB wikiart.org images with labels and received 15GB unlabeled posters from a local museum
- Implemented transfer learning with an Efficient Net in PyTorch to classify the posters' style genre

## Master Seminar

Apr 2020 – Aug 2020

### *Identify a Trial Population for Clinical Studies on Diabetes Drug Testing*

- Conducted an end-to-end clinical deep learning pipeline to predict **explainable** (XAI) diabetes hospitality rates
- My project was rewarded with the **best student paper award** by the German Informatics Society (SKILL 2021)

# Extracurricular Activities

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## Summer School: University of Oxford

Oxford, UK  
July 2023

- Accepted as one of few on-site participants for the **OxML NLP / Finance summer school**
- Courses: Quantum finance & NLP, Computational linguistics, Multi-lingual NLP and many more

## Summer School: Universidad Politécnica de Madrid

Madrid, Spain  
June 2022

- Selected as one of three scholarship recipients among all applicants from my university
- Course: AI Ethics, Won the **first prize** with our project: *Medical AI Diagnosis of Breast Cancer*

## FAU – Digital Tech Academy

Erlangen, Germany  
Apr 2022 – July 2022

- Selected as one of 20 exclusive participants among >150 applicants from my university
- Elite entrepreneurial and tech talents program at the University of Erlangen-Nuremberg

## Seasonal School: Sant'Anna School of Advanced Studies

Pisa, Italy  
Feb 2022 - Mar 2022

- Selected as one of two scholarship recipients among >30 applicants from my university
- Course: Innovations management and the common good, 28/30 points achieved

## Hackathon: Huawei Seeds for the Future 2021

Vienna, Austria  
Nov 2021

- **First place** at the "Tech4Good" hackathon hosted by Huawei with our vegetable app idea
- Selected as one of eight handpicked participants to gain exclusive insights into Huawei

## The Power MBA

Online  
Oct 2020 - Oct 2021

- Startup focused online MBA with many case studies and accredited teachers
- Courses: Business Model Innovation, Lean Startup, Business and Marketing Strategies

### Hackathon: Beiersdorf Oscar & Paul

- **Second place** of the 4-week Hackathon: *The Future of Skincare* with 27 international teams
- Participated as data scientist together with R&D scientists, business gurus and designers in my team

Online  
Sep 2020

### Udacity Nanodegrees

- Data Scientist, Natural Language Processing and Data Science for Business Leaders

Online

### Coursera Courses

- Deep Learning Specialization, AI for Medicine, Build GAN's

Online

## Leadership & Rewards

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### Freshman Mentor Program

- Voluntary support, meetings and helping a group of computer science freshmen

Nuremberg, Germany  
Nov 2020 – Mar 2021

### Germany Scholarship

- Rewarded for my performance and **GPA (3.7)** during my master's degree

Nov 2021 – Nov 2022

### Towards Data Science Associate Writer

- Frequently writing articles for *Towards Data Science* about Data Science related topics

Mar 2020 – Present

## Languages & Hobbies

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- **Languages:** German (native), English (fluent), Chinese ~ Mandarin (intermediate), Japanese (intermediate)
- **Hobbies:** Bouldering, Piano, Cooking, Reading books, Golf