

# Christoph Eberle

<https://www.linkedin.com/in/christoph-eberle> | [christoph.eberle@physik.uni-muenchen.de](mailto:christoph.eberle@physik.uni-muenchen.de)

## Work experience

---

### Ray Sono AG

#### Data Science and Machine Learning Intern

Munich, Germany

Feb. 2020 - Present

- Developed a Gaussian Process model for time series forecasting, improving mid-term to long-term prediction quality over previous models
- Performed time-series forecasting with ARIMA and Facebook Prophet
- Worked on outlier detection and analysis in noisy, non-stationary time-series
- Performed auto- and cross-correlation analyses, revealing systematic sensor faults

## Projects (more details at [christopheberle.github.io](https://christopheberle.github.io))

---

### Modelling the Impact of Contact-tracing Apps in Containing COVID-19

- Implemented graphical model from the paper “Digital Herd Immunity and COVID-19” (Bulchandani et al.) in Python
- Simulated contact-tracing for different disease parameters and calculated containment probabilities

### Predicting Wildfires in the US

- Built a Log-Normal Poisson model for predicting the number of monthly wildfires in the US in Python with PyMC

## Education

---

### Ludwig-Maximilians-Universität (LMU) Master of Science in Physics

Munich, Germany

May 2020 - Present

- Coursework: Machine Learning, Uncertainty in AI and Machine Learning, Information (Field) Theory, Monte-Carlo Methods, Signal Reconstruction in Python

### Ludwig-Maximilians-Universität (LMU) Bachelor of Science in Physics

Munich, Germany

Oct. 2016 - May 2020

- Coursework: Machine Learning in Python

## Skills

---

**Programming:** Python (NumPy, Pandas, PyMC, Tensorflow), R, SQL

**Languages:** Native Speaker of German, Fluent in English, Conversational in Japanese

**Others:** Microsoft Office