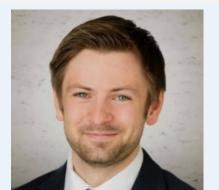
# **GREGGORY ZINNIEL**

https://www.linkedin.com/in/greggory-zinniel



**SKILLS** 

### **Programming**

• Assembly, C, C++, MATLAB,, Python

## **Machine Learning**

- PyTorch, Keras, Tensorflow
- SciKit-Learn, OpenCV, MediaPipe

# **Circuit Analysis**

- AC, DC, Analog
- RF and Rectangular Waveguides
- Single- and Multi-Phase Systems

## **Mathematics**

- Optimal Control
- Fourier Analysis, Linear Algebra

#### **CERTIFICATIONS**

# **USPTO Registered Patent Agent**

Washington D.C., USA

• Registration Number 78,134

### **Eagle Scout Rank**

Wayzata, Minnesota, USA

Troup 283

**LANGUAGES** 

## **English**

C2 (Native)

### German

B1 (Intermediate)

#### **HOBBIES AND INTERESTS**

## **▲** Bouldering and Climbing

• Part-Time route-setter Heavens Gate IG

## Photography

- Photo Gallery Link
- Raspberry Pi
- Smart Hangboard for climbing

#### **EDUCATION**

Master of Engineering | Oct 2021 – June 2024

TECHNICAL UNIVERSITY OF MUNICH | GPA: 1.8 (DE Scale)

Bachelor of Electrical Engineering | Sept 2021 – May 2024

UNIVERSITY OF MINNESOTA | GPA: 1.3 (DE Scale)

Study Abroad | Sept 2017 – Dec 2017

NORWEGIAN UNIVERSITY OF SCIENCE AND TECHNOLOGY TRONDHEIM

#### **RESEARCH EXPERIENCE**

Acoustic Analysis of Laser Welding Defects | Nov 2022 – June 2023 Institute for Machine Tools and Industrial Management, Technical University of Munich

- Implemented weld image recognition and alignment in imagery using TensorFlow and OpenCV
- Conducted acoustic denoising and classification Fourier Transforms, Noise Gates, and SciKit-Learn

**Rooftop and Superstructure Classification** | July 2023 – Mar 2024 Chair of Automotive Technology, Technical University of Munich

- Extracted, cleaned, and categorized aerial imagery using Rasterio, GeoPandas, and Google APIs
- Developed deep learning models with PyTorch for semantic segmentation with PyTorch and Keras
- Explored novel self-supervised learning techniques for aerial and biomedical data

### **WORK EXPERIENCE**

## Myoelectric Technician |

July 2023 – Feb 2024

TASKA Prosthetics, Munich, DE

- Conducted repairs, tests, and software upgrades on myoelectric prosthetic hands
- Developed a macro-enabled tracking system for company diagnostics

### Patent Agent |

Mar 2017 – May 2021

Fredrikson & Byron, Minneapolis, Minnesota, USA

- Promoted from Intern to Staff Scientist in 2018, and then to Patent Agent in 2019
- Led comprehensive analyses of patentability, novelty, and strategic value for clients
- Drafted and prosecuted patents at the U.S. and European Patent Offices (USPTO and EPO)

### **Electrical Engineer Intern**

May 2016 – Sept 2016

Loram Maintenance of Way, Hamel, Minnesota, USA

- Optimized and developed power distribution systems and circuit logic for trains
- Researched EN and UL certifications to ensure compliance with international industrial standards