Patricia M. Strutz

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EDUCATION

Stanford University Stanford, CA

Candidate for B.S. in Electrical Engineering, Minor in Psychology

Expected Graduation in 2025

GPA: 3.776

Relevant Coursework: Linear Algebra, Multivariable Calculus, and Modern Applications; Programming Abstractions; Mathematical Foundations of Computing; Probability for Computer Scientists; Introduction to Neuroelectrical Engineering; Differential Equations; An Intro to Making: What is EE

Munich International School

Munich, Germany

Bilingual IB Diploma – 44/45 points GPA: 7.0 (equivalent to US unweighted 4.0)

2015 - June 2021

SKILLS

Python, PyTorch, C++, Arduino, WaveForms, Microsoft Office, basic HTML & CSS, Analog & Digital Circuit Design, Signal Processing

ENGINEERING EXPERIENCE

Intelligent Robotic Interaction at Scale (IRIS) Lab, led by Prof. Chelsea Finn

Stanford, CA

Part-time Research Assistant & Full-time Summer Research Intern

January 2022 – Now

- Independent research project: new method for implicit goal-conditioned behavior cloning
- Implemented 4+ simulated robotic environments
- Collaboration with Berkeley RAIL Lab

- PyTorch for ML / Reinforcement Learning, training multiple Neural Networks
- 200+ hours of model training
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Independent Project, Stanford Brain-Computer Interfaces (SBCI)

Stanford, CA

Project Leader

Fall 2021 – Now

- Building EEG from scratch
- Arduino, Sensors, Circuit design
- Oscilloscope measurements
- Developing custom chip for EEG recordings
- Designing experiments for hardware testing
- Signal filtering & processing with Instrumentation and Operational Amplifiers

Technical University of Munich, Chair of Information-oriented Control

Munich, Germany

Remote Summer Research Intern

June 29th – August 19th, 2020

- Python implementation of the novel Gaussian process regression approach proposed in "Real-Time Regression with Dividing Local Gaussian Processes" by Armin Lederer et al.
- Techniques employed: Gaussian process regression using the Cholesky factorization, building binary trees, recursive algorithms, generating 2- and 3-dimensional plots
- Participated in 21. IFAC World Congress

INTERESTS

- Brain-Computer Interfaces, Sensors, Wearable Devices, Robotics, Signal Processing
- Neuroscience and Psychology
- Fitness, Nutrition, Weightlifting