

Patricia M. Strutz

236 Santa Teresa St, Stanford, CA 94305 | (650) 656-6010 | University Email: pstrutz@stanford.edu

EDUCATION

Stanford University

Undeclared, possibly Computer Science

GPA: 3.533

Relevant Coursework: Linear Algebra, Multivariable Calculus, and Modern Applications; Programming Abstractions; Mathematical Foundations of Computing

Stanford, CA

Expected Graduation in 2025

Munich International School

Bilingual IB Diploma – 44/45 points

GPA: 7.0 (equivalent to US unweighted 4.0)

Coursework: HL Mathematics Analysis & Approaches; HL Computer Science; HL Physics; HL English Literature; SL History; SL German Language & Literature

Relevant Projects: Extended Essay in Mathematics – *Comparison of Two Mathematical Approaches to Stabilize an Inverted Pendulum*

Academic Honors: Mathematics Analysis & Approaches Distinguished Mathematician 2021; Computer Scientist of the Year 2021; Physician of the Year 2021

Munich, Germany

2021

ENGINEERING EXPERIENCE

Technical University of Munich, Chair of Information-oriented Control

Remote Summer Intern

Munich, Germany

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

Johns Hopkins University Engineering Innovation

Summer Student

Baltimore, MD

June 24th – July 19th, 2019

- Completed course with final grade ‘A’, earning 3 credits
- Attended lectures by graduate students and PhD fellows
- Topics covered: mechanical, civil, electrical, and chemical engineering

HARMAN

Summer Intern

Garching, Germany

June 3rd – June 21st, 2019

- Python programming using SQLite to develop auto-correcting algorithm
- Exposure to Information Retrieval, A* algorithm, software testing processes, and software architecture
- Participation in ADAS (Advanced Driver-Assistance Systems) meeting
- Participation in HARMAN University meetings

LEADERSHIP EXPERIENCE

Student Council, Munich International School

Munich, Germany

President

2020/21

- Organized and led weekly meetings
- Created organizational structure within council
- Ensured communication between student body and school administration
- Led planning and execution for spirit events and fundraisers (e.g., Women's Empowerment Month)
- Helped build leadership skills in other members

Christian's Ski & Snowboard School

Bolsterlang, Germany

Ski Instructor; officially licensed since 2020

Winter 2018, 2019, 2020

- Private instructor for beginning skiers
- Class instructor for children with various levels of expertise
- Customer care, cashier, computer work in the front office
- Tuning of rental skies and snowboards

SKILLS & INTERESTS

- Proficiency in Python programming
- Proficiency in working with spreadsheets
- Control of Mobile Robots online course authorized by the Georgia Institute of Technology and offered through Coursera (May 2020)
- Machine Learning Coursera course offered by Stanford University
- Robotics – founded FTC Team Undecided (Munich International School) in 2018
- Athletics: Fitness, Soccer, Basketball, Skiing
- Basketball refereeing