Stanford

Fabian Pascal Rothmaier

Ph.D. Student in Aeronautics and Astronautics, admitted Autumn 2018

Bio

BIO

Fabian Rothmaier is a M. Sc. student in the Stanford GPS Research Laboratory working under Prof. Per Enge, Dr. Todd Walter and Dr. Yu-Hsuan Chen in the Department of Aeronautics and Astronautics. Before coming to Stanford, he received his B. Eng. degree in Aviation System Management and Engineering at the University of Applied Sciences Bremen, Germany in 2015. Concurrently, he completed the Airline Pilot Flight Training at Lufthansa AG in Bremen, Germany and Phoenix, AZ.

Fabian is the current President of the Stanford Aviators club and a 2016 fellow of the International Society of Transport Aircraft Training (ISTAT). He has a German and US private pilot license and a commercial drone pilot certificate.

HONORS AND AWARDS

- 2016 Scholarship, International Society of Transport Aircraft Trading (ISTAT) Foundation (2016)

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

- Member, German Society of Project Management (GPM) (2012 - present)
- President, Stanford Aviators (2016 - present)
- Member, AIAA (2016 - present)
- Member, German Society of Aeronautics and Space (DGLR) (2012 - present)

EDUCATION AND CERTIFICATIONS

- B. Eng., University of Applied Sciences Bremen , Aeronautical management and engineering (2015)
- MPL, Lufthansa Flight Training , Airline Pilot (2015)

LINKS

- LinkedIn Profile: https://www.linkedin.com/in/fabian-rothmaier-3a0b96118
- Stanford GPS lab: https://gps.stanford.edu

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

The detection and prevention of GPS jamming and spoofing attempts through improved antenna design. The work includes the analysis of GPS signals, thread and test case definitions, and the integration in current and future environments.

LAB AFFILIATIONS

- Per Enge, GPS laboratory (9/26/2016)

Professional

WORK EXPERIENCE

- Research Intern - Airbus Defence & Security

Publications

PUBLICATIONS

- **Developing a Dual Polarization Antenna (DPA) for High Dynamic Applications**
  Lo, S., Chen, Y., Rothmaier, F., Zhang, G., Lee, C., Inst Navigat
  INST NAVIGATION.2020: 1001–20
- **Accommodating Direction Ambiguities in Direction of Arrival based GNSS Spoof Detection**
  Jain, H., Lo, S., Chen, Y., Rothmaier, F., Powell, J., Inst Navigat
  INST NAVIGATION.2019: 274–89
- **Demonstrating Single Element Null Steering Antenna Direction Finding for Interference Detection**
  Chen, Y., Lo, S., Perkins, A., Rothmaier, F., Akos, D., Enge, P., Inst Navigat
  INST NAVIGATION.2018: 240–59