

Academic History

Swiss Federal Institute of Technology (ETH Zürich)

Zürich, Switzerland

PH.D IN ROBOTICS

Expected 2018

University of Kansas

Lawrence, KS, USA

M.S. WITH HONORS IN AEROSPACE ENGINEERING

2012 - 2014

Delft University of Technology

Delft, Netherlands

SEMESTER ABROAD

Spring 2012

University of Kansas

Lawrence, KS, USA

B.S. IN AEROSPACE ENGINEERING

2008 - 2012

Research Positions

Autonomous Systems Lab, ETH Zürich

Zürich, Switzerland

RESEARCH ASSISTANT

2014 - Present

Center for Remote Sensing of Ice Sheets (CReSIS), University of Kansas

Lawrence, KS, USA

RESEARCH ASSISTANT

2012 - 2014

Autonomous Flight Systems Group, University of Kansas

Lawrence, KS, USA

UNDERGRADUATE RESEARCH ASSISTANT

2011

Aerospace Adaptive Structures and Materials Laboratory, University of Kansas

Lawrence, KS, USA

UNDERGRADUATE RESEARCH ASSISTANT

2008 - 2009

Research Projects

SolAIR: Solar-powered Automated Aerial Imaging and Reconnaissance using Infrared Cameras

SUPPORTED BY ARMASUISSE SCIENCE & TECHNOLOGY CENTER

2016 - Present

Adventura AtlantikSolar@Brazil

SUPPORTED BY SWISSNEX BRAZIL, SWISSANDO, AND ETH GLOBAL

☞ <http://www.swissnexbrazil.org/atlantiksolar/>

2015

AtlantikSolar: A UAV for the first-ever autonomous solar-powered crossing of the Atlantic Ocean

SUPPORTED BY PRIVATE INVESTORS AND INTERNAL LABORATORY BUDGET

☞ <http://www.atlantiksolar.ethz.ch/>

2014 - Present

SHERPA: Smart collaboration between Humans and ground-aerial Robots for improving rescuing activities in Alpine environments

SUPPORTED BY THE EUROPEAN COMMISSION UNDER THE 7TH EUROPEAN FRAMEWORK

PROGRAMME (#600958)

☞ <http://www.sherpa-project.eu/>

2014 - Present

ICARUS: Robotic Search and Rescue

SUPPORTED BY THE EUROPEAN COMMISSION UNDER THE 7TH EUROPEAN FRAMEWORK

PROGRAMME (#285417)

☞ <http://www.fp7-icarus.eu/>

2014 - 2015

Multi-Agent Airborne Laboratory for Cryospheric Remote Sensing

SUPPORTED BY THE PAUL G. ALLEN FAMILY FOUNDATION

2014

CReSIS: Center for Remote Sensing of Ice Sheets

SUPPORTED BY THE NATIONAL SCIENCE FOUNDATION (NSF) UNDER GRANT ANT-0424589

☞ <https://www.cresis.ku.edu/>

2012 - 2014

Professional Skills

Robotics Flight instrumentation – avionics and sensors. Basics of electronic components, circuits, soldering, crimping techniques. Basics of structural design/fabrication. Radio controlled piloting experience on small fixed-wing platforms.

Software MATLAB/Simulink, MSC Nas-tran/Patran (Finite Element Analysis), National Instruments LabVIEW, Unigraphics NX (CAD), Linux / Mac / Windows OS

Programming C/C++, Python (limited), Robotic Operating System (ROS), version control (Git), microcontroller programming (ARM), HTML

Honors & Affiliations

Awarded United States Department of Defense Antarctica Service Medal (2014)

Sigma Gamma Tau, National Aerospace Honors Society (2010 - 2014)

C&C Chaffee Engineering School Scholarship (2012 - 2013)

University of Kansas Aerospace Undergraduate Researcher Award (2012)

Publications

Published work available at: ☞ <https://scholar.google.com/citations?user=R5Fs1A4AAAAJ&hl=en>

References available upon request.