# PETER PIETRZYK

## **EDUCATION**

01/2017 - now	University of Georgia, Athens, GA, USA
	Dept. of Plant Biology, Computation Plant Science Lab, PhD Student, Graduate research assistant
09/2011 - 01/2015	Delft University of Technology, Delft, The Netherlands
	Master of Science Geomatics, MSc thesis: Change detection in forests using multi-temporal high density
	airborne laser scanning data
11/2012	Czech Technical University, Prague, Czech Republic
	Athens Programme (1 week exchange), Digital signal and image processing with applications
09/2005 - 08/2012	Delft University of Technology, Delft, The Netherlands
	Bachelor of Science Aerospace Engineering, Minor: Earth and Planetary Observation Technology

#### **EMPLOYMENT**

10/2015 - 12/2016	Geocart, Herten, Germany
	Geomatics Engineer, Quality control, sensor operator (aerial images, ALS), GPS surveying
02/2015 - 09/2015	GeoSignum, Delft, The Netherlands
	Junior Geomatics Engineer (part-time), Road feature extraction from airborne and mobile laser
	scanning, 3D modelling, spatial database development
01/2014 - 06/2014	GeoSignum, Delft, The Netherlands
	Internship (2 days/week), 3D modelling using mobile laser scanning data
10/2004 - 06/2005	Military Service, Stabskompanie, 7. Panzerdivision

## PUBLICATIONS

R.C. Lindenbergh, **P.J. Pietrzyk** 2015 - Change detection and deformation analysis using static and mobile laser scanning, Applied Geomatics, pages 1-10

**P.J. Pietrzyk** and R. C Lindenbergh, 2014 - Detection of harvested trees in forests from repeated high density airborne laser scanning, ISPRS Annals of Photogrammetry, Remote Sensing and Spatial Information Sciences, II-5, 275-280

D. Lee, **P.J. Pietrzyk**, et al., 2013 - Modeling and observation of heat losses from buildings: The impact of geometric detail on 3D heat flux modelling, 33rd EARSeL Symposium

**POSTERS** (\*corresponding author, + presentation)

**P. Pietrzyk\***<sup>+</sup>, C. Chutoe, P. Saengwilai, A. Bucksch – Automated phenotyping of root hair traits from microscopy images. Poster at "CROPS 2017", Huntsville, AL, USA, June 5-8 2017

**P. Pietrzyk**, J. Burridge, N. Klepp, J. Miller, J.P. Lynch, A. Bucksch<sup>\*+</sup> – The phenotypic spectrum of crop roots. Poster at "Plant Biology 2017", Honolulu, HI, USA, June 23-28 2017

**P. Pietrzyk\***<sup>+</sup>, C. Chutoe, P. Saengwilai, A. Bucksch – Automated phenotyping of root hair traits from microscopy images. Poster at "Plant Biology 2017", Honolulu, HI, USA, June 23-28 2017

**P. Pietrzyk**\*\*, C. Chutoe, P. Saengwilai, A. Bucksch – Automated phenotyping of root hair traits from microscopy images. Poster at "Phenome 2018", Tucson, AZ, USA, February 14-17 2018

**P. Pietrzyk**\*\*, C. Chutoe, P. Saengwilai, A. Bucksch\* – Automatic detection and quantification of individual root hairs in complex arrangements. Poster at "Plant Biology 2018", Montreal, Canada, July 14-18 2018

# PRESENTATIONS

06/2014	ISPRS Technical Commission V Symposium, Riva del Garda, Italy Talk: Detection of harvested trees in forests from repeated high density airborne laser scanning	
TEACHING		
04/2009 - 06/2009	Delft University of Technology, Delft, The Netherlands	
	Teaching assistant, programming in Java	
08/2018 - (ongoing)	University of Georgia, Athens, GA	
	Teaching assistant, Collaboratorium: Discovering Underground Communication	
TRAVEL AWARDS		
2017	Travel grant to attend Field-Based High Throughput Phenotyping Workshop in Maricopa, AZ (\$500)	
2018	Travel grant to attend Phenom 2018 conference on phenotyping of plants in Tucson, AZ (\$1380)	
MENTORING		
Chartinun Chutoe	Visiting scholar from Mahidol University (University of Georgia, Athens, USA), Effects of Suboptimal Nitrogen Phosphorus Potassium on Root Hair Development of Rice, Maize and Soybean	
SYNERGISTIC ACTIVITIES		

2018	Treasurer, Plant Biology Graduate Student Association
2018	Committee member for professional development workshop at UGA Plant Center Fall Retreat
2018	Volunteer at Plant Biology 2018 conference (ASPB) in Montreal, Canada