

KLAUS OKKELBERG

Atlanta, GA • 484-226-8020 • klaus.okkelberg@gmail.com
US Citizen

OBJECTIVE

Electrical engineering Ph.D. candidate seeking an internship for summer 2016 in the areas of control systems, digital signal processing, or communications

EDUCATION

Georgia Institute of Technology, Atlanta, GA expected 2017

Ph.D. in Electrical and Computer Engineering

Emphasis: Systems/Controls and Telecommunications

GPA: 3.66/4.0

University of New Orleans, New Orleans, LA 2014

M.S.E. in Electrical Engineering

Thesis topic: Nonlinear filtering for battery health management

GPA: 4.0/4.0

The Pennsylvania State University, University Park, PA 2011

B.S. in Electrical Engineering

Schreyer Honors College Scholar (Representing the top 1% of Penn State students)

Honors Thesis topic: Nonlinear control system for nuclear magnetic spectroscopy

GPA: 3.8/4.0

EXPERIENCE

Pennsylvania State University, University Park, PA

A –

A

PROJECTS

Research Assistant under Dr. Jeffrey L. Schiano March 2010-May 2011

- Determined performance of MIMO configurations for LTE-Advanced
- Go-Pro-based underwater fish recognition and tracking using FAST SURF feature matching and dark channel prior transmission map estimation
- Detection of battery short circuit using high-gain adaptive observer
- Video jitter removal and stabilization using point feature matching and phase correlation
- Image reconstruction from incomplete, quantized measurements using discretized solution of Euler-Lagrange equation
- Estimation of vehicular dynamics through dual nonlinear filtering of vehicle state and operating parameters
- Investigation of resonant tunneling through a double-barrier diode
- Quantum interference visibility in an oscillating macroscopic mirror
- High-speed adaptive decision feedback equalization for SerDes communications
- Digital clock with laser display system for Senior Design Project

NOTES

Software: Matlab, Simulink, PSPICE, Multisim, Mathematica, AutoCAD, Solidworks, GIT, Photoshop, MS Office

Programming: Matlab, Fortran, C, Java, Python, Visual Basic, Perl, Tcl/Tk, LabView, LaTeX

Social Skills: Good communication skills, strong problem solving ability, excellent at teamwork