Current Address
710 Peachtree St. NE
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(732) 284-9815

Evan T Gebhardt

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Permanent Address
66 Riverside Ave
Apartment 20
Red Bank, NJ 07701

Education:

The Georgia Institute of Technology, Atlanta, GA — May 2021 (Expected Graduation)
Ph.D. Student in Electrical and Computer Engineering
GPA: 4.0
Research Adviser: Prof. Marilyn C Wolf

The Pennsylvania State University, State College, PA
Master of Science, Electrical Engineering — May 2017
GPA: 3.75
Research Adviser: Prof. Ram M. Narayanan.

Bachelor of Science, Electrical Engineering — May 2015
GPA: 3.59

Skills:

MATLAB, Python, Latex (experienced)
C++ (some experience)

Academic Experience:

The Georgia Institute of Technology, Atlanta, GA — August 2017-Present
Graduate Research Assistant

- Development of a visual-infrared dataset for use in object detection.
  - Focus on difficult scenes and pedestrian and vehicle detection
- Creation of noise models to simulate atmospheric distortions and their impact on performance of object detection.

The Pennsylvania State University, State College, PA — July 2015-May 2017
Research Assistant

- Through Wall Radar research utilizing multiple antennas
- Developed signal processing algorithms to improve detection and localization of targets behind walls
  - Range Migration algorithm for SAR imaging
  - Wavelet Based SVD wall clutter mitigation
- Utilized stepped frequency radars to collect data to form range Doppler maps for classification of number of targets behind wall

The Pennsylvania State University, State College, PA — August 2014-May 2015
Teaching intern

- Taught students how to use oscilloscope and function generators to complete labs.
- Guided students through circuit design concepts
- Demonstrated to students how to troubleshoot circuits

Work Experience:

Microwave Measurement Systems LLC, State College, PA — November 2014-July 2015
Designs and develops free space systems for microwave characterization of electromagnetic properties of materials
Engineer

- Oversaw assembly and test of free space measurement system
  - Issued purchase orders and tracked materials for timely delivery

    - Assembled free space system and tested it to ensure the electromagnetic measurements were within X-band specifications
    - Built shipping crate and ensured it met all international shipping requirements
- Traveled to Saudi Arabia to assemble free space system and demonstrate to Saudi research group
- Handled all day to day operations with responsibilities ranging from cleaning premise and dealing with vendors to repairing VNA.

General Electric, Transportation, Erie, PA May 2014-August 2014
GE Transportation is a global technology leader and supplier to the railroad, mining, marine, stationary power, drilling, and energy storage industries.
Electrical Engineering Intern

- Created simulator to test engine control panel, and generator control panel.

JLG Industries, Inc., Orrville, OH June 2013-August 2013
JLG Industries is the world's leading designer, manufacturer and marketer of access equipment
Electrical Engineering Intern

- Diagnosed wire harness problems to ensure telehandler prototypes stayed on schedule
- Reviewed schematics to ensure components were up to date.
- Updated existing wire harnesses to meet design requirements

Conference Papers: **Gebhardt, Evan T.**, Ram M. Narayanan, and Sean P. Broderick. "MIMO radar for through-wall target identification in single and two wall scenarios." *SPIE Defense+ Security*. International Society for Optics and Photonics, 2016.

Journal Papers: Narayanan, Ram & **T. Gebhardt, Evan** & P. Broderick, Sean. (2017). Through-Wall Single and Multiple Target Imaging using MIMO Radar. Electronics. 6. 70. 10.3390/electronics6040070.

Societies: Mentor, Penn State Engineering Orientation Network
Member, Eta Kappa Nu
IEEE, Member of Penn State Student Chapter