

KELLY E. BURGHART

Highland Park, NJ
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Curriculum Vitae

EDUCATION

Rutgers, The State University of New Jersey - New Brunswick, NJ
Ph.D. Atmospheric Science May 2024 (expected)
M.S. Atmospheric Science May 2021 (expected)

Rensselaer Polytechnic Institute - Troy, NY
B.S. Electrical Engineering May 2014

ACADEMIC APPOINTMENTS

Rutgers, The State University of New Jersey - New Brunswick, NJ
Graduate Assistant July 2020 - Present
Graduate Assistantship through the Institute of Earth, Ocean, and Atmospheric Sciences.

Graduate Fellow September 2019 - June 2020
School of Environmental and Biological Sciences (SEBS) Excellence Fellowship for doctoral study in atmospheric science.

PROFESSIONAL EXPERIENCE

National Instruments Corporation - Austin, TX
Staff Systems Analyst - Product Master Data Management November 2018 - May 2019
Manage projects to maintain and improve quality of product data. Coordinate across the company to define database attributes and ensure specification accuracy.

Staff Business Analyst - Sales May 2018 - November 2018
Drove key business decisions and policy development for process and tool improvements within the customer support organization. Enabled data-driven decision making by facilitating adoption of self-serve reporting applications, including Tableau.

Systems Analyst - eCommerce May 2017 - May 2018
Leveraged project management expertise to improve the development process of a web application user interface. Encouraged new workflows within the team to complete the project on time and with effective use of team resources. Wrote and tested user interface requirements.

Applications Engineering Specialist - Embedded Systems March 2016 - May 2017
Specialized in providing advanced support for large embedded control systems and wireless communication research systems. Managed relationships with customers in academic and private industries, coordinated and delivered on large and small scale support offerings.

Applications Engineer, Engineering Leadership Program July 2014 - March 2016
Provided front line customer support and troubleshooting on a broad range of products including desktop applications, real-time embedded systems, and automated vision programs.

Rensselaer Polytechnic Institute - Troy, NY
Academic and Research Computing - Help Desk Consultant August 2011 - May 2014

Provided student, faculty, and staff computing support. Created and updated internal and public technical content with the goal of maintaining technical expertise in a high-turnover role.

Cisco Systems Incorporated - San Jose, CA

Communication and Collaboration IT Intern

May 2013 - August 2013

Built prototype for sustainable database to enable rapid global coordination between data centers. Developed web interfaces for databases using HTML, Java, and SQL.

Ioxus Incorporated - Schenectady, NY

Engineering Co-op

May 2012 - January 2013

Engineering Intern

May 2011 - August 2011

Developed automated test equipment for use in manufacturing facility. Managed project bill of materials, coordinated with Accounts Payable to purchase equipment. Developed skills in analog and digital circuit design, embedded control, electronic power conversion, design, fabrication and population of printed circuit boards, assembly and packaging of equipment.

HONORS AND AWARDS

SEBS Excellence Fellowship for Doctoral Study in Atmospheric Science	2019
Girl Scout Gold Award, Girl Scouts of the U.S.A.	2010
Rensselaer Medal for Excellence in Mathematics and Science	2009

CONFERENCE PRESENTATIONS

Levy, E., & Burghart, K. (2017, May). *Common Recommendations in NI Code Reviews*. Lecture presented at National Instruments NIWeek, Austin, TX.

TEACHING EXPERIENCE

National Instruments Corporation - Austin, TX

NI LabVIEW Instructor

January 2015 - May 2017

LabVIEW Core 1, LabVIEW Core 2, Embedded Control and Monitoring Using LabVIEW, LabVIEW Performance, LabVIEW Connectivity, High-Throughput LabVIEW FPGA

PROFESSIONAL AND COMMUNITY SERVICE

Rutgers, the State University of New Jersey

EOAS Diversity and Inclusion Committee Member

June 2020 - Present

Represented graduate students in Atmospheric Science to committee focused on creating a more diverse and inclusive environment across departments affiliated with the Rutgers Institute of Earth, Ocean, and Atmospheric Sciences.

Graduate Liaison to the Office of Advanced Research Computing

September 2019 - Present

Served as representative for the Atmospheric Science program to Rutgers University Office of Advanced Research Computing (OARC) with the goal of building stronger relationships between academic departments and OARC in addition to identifying opportunities for interdisciplinary collaboration.

Skype A Scientist

Volunteer Scientist

January 2020 - Present

Participate in video conversations with classrooms of students (K-12) on questions about science, specifically climate science and meteorology.

National Weather Service

SKYWARN Volunteer Severe Weather Spotter

February 2019 - Present

Observed and reported severe weather conditions to local National Weather Service office to aid in accurate and timely dissemination of weather statements.

Community Collaborative Rain, Hail, & Snow Network

NJ-MD-96 — Highland Park 0.4 SSW

July 2020 - Present

TX-TV-313 — Austin 7.0 NE

October 2017 - May 2019

Measured and reported daily precipitation data as part of nationwide program. Contributed to creation of a dense map of precipitation data for interpretation by end users in public and private sectors.

FIRST Robotics Competition

Control Systems Advisor

2014-2017

Assisted FIRST Robotics Teams at regional and national championship events with troubleshooting technical problems in their robot control system. Coordinated with Robot Inspectors and Field Technical Advisors to diagnose issues on and off the playing field.

CERTIFICATIONS

Scrum Alliance Certified Scrum Product Owner

November 2017

National Instruments Certified LabVIEW Developer

December 2015

F.A.A. Private Pilot (Airplane, S.E.L.)

October 2012