

# JOEL GONZALEZ

bgonzale@andrew.cmu.edu ◇ <https://github.com/b-joel-gonzalez> ◇ [b-joel-gonzalez.github.io](https://b-joel-gonzalez.github.io)

## EDUCATION

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### Carnegie Mellon University (CMU)

Pittsburgh, PA

College of Engineering

2021 - Present

- Ph.D. Student in *Electrical and Computer Engineering*
- M.S. in *Electrical and Computer Engineering*, concentration in *Integrated Systems* — May 2024
- Research Advisor: Dr. L. Richard Carley
- Research Interests: integrated systems design, device fabrication, rapid prototyping of computer systems, RF engineering, metrology and instrumentation

### University of Pennsylvania (UPenn)

Philadelphia, PA

School of Engineering & Applied Science

2015 - 2021

- M.S.E. in *Robotics* — May 2021
- B.S.E. in *Computer Science*, minor in *Mathematics* — December 2019

## TEACHING EXPERIENCE

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Semesters as lead TA denoted by \*.

- [CMU] 18-427/727: *Board-Level RF Systems for IoT* — Fall 2022\*, Fall 2023\*, Fall 2024\*, Fall 2025\*
- [CMU] 18-540/745: *Rapid Prototyping of Computer Systems* — Spring 2023
- [UPenn] ESE450/451: *ESE Senior Design* — Fall 2019, Spring 2020, Fall 2020\*, Spring 2021\*
- [UPenn] ESE350/519: *Embedded Systems Lab* — Fall 2020, Spring 2021\*
- [UPenn] ESE190/M&TSI: *Introduction to Hardware/Software Lab* — Spring 2019, Summer 2021\*
- [UPenn] CIS371/501: *Computer Architecture* — Fall 2019, Spring 2020
- [UPenn] CIS380/548/CIT595: *Operating Systems* — Fall 2019, Spring 2020\*, Summer 2020\*
- [UPenn] CIS240/CIT593: *Introduction to Computer Systems* — Fall 2018, Spring 2019, Summer 2019

## WORK EXPERIENCE

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### MIT Lincoln Laboratory

Lincoln, MA

Division of Communication Systems

May 2023 - August 2023

- Summer 2023 research intern working on RF systems design and analysis for communication systems
- Programmed in Python and worked with RF hardware to analyze RF networks, spectra, and phase noise
- Internship completed as part of employer sponsorship via GEM Fellowship

## ACTIVITIES, AWARDS, AND RECOGNITIONS

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- Recipient of the 2017 Penn Undergraduate Research Mentoring (PURM) Grant
- Recipient of the 2018 Penn Engineering Exceptional Service Award
- Recipient of the 2019 Littlejohn Scholars Summer Research Grant
- 2019-20 J.P. Eckert Fellow
- 2020 inductee of the CIS Max Mintz Undergraduate TA Hall of Fame
- Recipient of the Summer 2020 TA Award for Excellence in Student Support with Distinction
- Honorable Mention for the 2021 Penn Engineering Outstanding Teaching Award
- Carnegie Institute of Technology Dean's Fellow
- Selected to participate in the 2022 NextProf Pathfinder workshop hosted by UMich and UCSD
- Completed the Future Faculty Program in Fall 2022 (Eberly Center for Teaching Excellence and Educational Innovation, Carnegie Mellon University)
- Recipient of the GEM Fellowship, with a sponsorship by MIT Lincoln Lab for Summer 2023
- 2022-25 CMU Robotics Club Officer