# Jakob DeLong, Ph.D.

203 E 3rd St Phone: (573) 341-4082

Rolla, MO 65401 Email: jdyf7@mst.edu

## Education

* 2022—Ph.D. in Electrical Engineering, advisor: Dr. Joel T. Johnson
  + The Ohio State University, Columbus, Ohio
* 2017—B.S. in Electrical Engineering, summa cum laude, Computer Science minor
  + West Virginia University, Morgantown, WV

## Professional Experience

* August 2025, Assistant Teaching Professor, Missouri Science & Technology Department of Electrical and Computer Engineering
  + Teaching 6-9 credits per semester
  + Designing new Linear Systems course
* August 2022-August 2025, Assistant Professor, University of Jamestown Department of Engineering
  + Taught 9-12 credits per semester
  + Taught engineering major and non-major classes
  + Advised engineering student social club
* August 2017-July 2022 Graduate Research Assistant, ElectroScience Laboratory, OSU
  + Performed research under Dr. Graeme Smith and Dr. Joel Johnson
  + Conducted experiments with radar/remote sensing systems in Cognitive Sensing Lab
  + Produced periodic progress/research reports
* August 2014-May 2017 Supplemental Instruction Teacher
  + Taught supplemental Calculus I course
  + Created lesson plans
  + Managed attendance spreadsheet
* June 2016-August 2016 Undergraduate Researcher, Northeastern University COE, ECE
  + Worked on research project optimizing clutter suppression for ground penetrating radar mine detector
  + Conducted independent research and testing
  + Produced poster and presentation detailing results

## Conference Papers

* Keesee, CL, **DeLong, J,** Fig, M, Hibl, G, Ebsch, Z, Homola, D, Mimong, I, Thompson, B, & Young, C. "An Innovative and Ambitious Student Design Project: To Build a Small-Scale Brayton Cycle Engine on a Short Timeline With a Limited Budget." *Proceedings of the ASME Turbo Expo 2024: Turbomachinery Technical Conference and Exposition*. *Volume 6: Education; Electric Power; Energy Storage; Fans and Blowers*. London, United Kingdom. June 24–28, 2024. V006T07A001. ASME.
* **J. DeLong** and J. T. Johnson, "Simulation Study of a Probabilistic Measurement Terminator for cloud Radar Systems using Cloudsat data," *IGARSS 2022 - 2022 IEEE International Geoscience and Remote Sensing Symposium*, Kuala Lumpur, Malaysia, 2022, pp. 8012-8015
* **J. DeLong** and J. T. Johnson, "An Algorithm for Adaptive Determination of Radar Coherent Integration Time," *IGARSS 2020 - 2020 IEEE International Geoscience and Remote Sensing Symposium*, Waikoloa, HI, USA, 2020, pp. 6579-6581
* **J. DeLong**, M. A. Shattal, A. O’Brien, C. D. Ball, J. T. Johnson and G. E. Smith, "Fully Adaptive Cloud Profiling Radar Simulation," *IGARSS 2019 - 2019 IEEE International Geoscience and Remote Sensing Symposium*, Yokohama, Japan, 2019, pp. 10087-10090

## Honors and Awards

* IGARSS 2022 Student Paper Competition Finalist
* IGARSS 2019 Student Paper Competition Finalist
* NASA NSTRF18 Fellow

## Service

### University Service

* Member, University of Jamestown Institutional Review Board, 2024-2025
* Member, University of Jamestown Look Forward Committee, 2022-2024
* Co-Advisor, University of Jamestown Engineering Social Club, 2023-2025

### Community Outreach

* Board Member, James Valley Robotics Association, 2023-present

## Teaching and Advising

* Major advisor for 10-12 undergraduate students in engineering, 2023-2025

### Courses Taught at University of Jamestown

* Numerical Methods (ENGR 361)
* Introduction to Engineering Computing (ENGR 121)
* Introduction to Electric Circuits\L (ENGR 380\L)
* Control Systems (ENGR 362)
* College Physics II\L (non-majors, PHYS 144\L)
* Instrumentation and Measurement (ENGR 381)

### Courses Taught at Missouri S&T

* Control Systems (EE 3320)
* Linear Systems (EE 2400/2401)

## Professional Society Memberships

* Institute for Electrical and Electronics Engineers (IEEE), 2014-present
  + IEEE Geoscience and Remote Sensing Society (GRSS), 2019-present
* American Society for Engineering Education (ASEE), 2023-present