

# Aidan Lakshman

✉ [AHL27@pitt.edu](mailto: AHL27@pitt.edu) ☎ (724) 612-9940 🌐 [www.ahl27.com](http://www.ahl27.com) 📄 AHL27

## Work Experience

<b>Meta (Facebook)</b> , Research Scientist (Systems/Infrastructure)	New York, NY
• Looking forward to starting in September!	Sept 2025 – present
<b>University of Pittsburgh</b> , Graduate Researcher	Pittsburgh, PA
• Built a clustering algorithm in C to process graphs with >1B nodes using < 64GB RAM	Aug 2020 – Aug 2025
• Designed novel algorithms in R to predict gene function from evolutionary signal	
• Researched new ways to infer causal relationships in the presence of missing data	
• Led preliminary research for successfully funded U01 grant	
<b>Amazon Web Services</b> , Software Development Engineer Intern	Herndon, VA
• Streamlined AWS account onboarding experience for Research Service Workbench on AWS (SWB) from an error-prone, multi-context process to a one-click workflow	Summer 2020 & 2021
• Led implementation of SWB's first comprehensive unit testing framework	
• Designed frontend components with React, backend with Node.js and AWS Lambda	
<b>Carnegie Mellon University</b> , Robotics Institute Summer Scholar	Pittsburgh, PA
• Improved traffic signals by predicting bus behavior with Bayesian modeling in Python	Summer 2018
• Built assistive technology to allow intersections to aid mobility-impaired pedestrians	

## Education

<b>PhD University of Pittsburgh</b> , Bioinformatics	Pittsburgh, PA
Research: Designing scalable algorithms to analyze massive genomic datasets	2025
<b>BS University of Central Florida</b> , Mathematics	Orlando, FL
<i>magna cum laude</i> , Burnett Honors College, National Merit Scholar	2020

## Projects

- 6502 Computer:** Built a 6502 computer on a breadboard, created a 6502 emulator in C to run and debug programs in Assembly, wrote a Forth OS from scratch in 6502 Assembly
- Cloud Storage Server:** Built a cloud storage server using Nextcloud on top of a LAMP stack

## Grant Funding

<b>R Consortium</b> , <i>Infrastructure Steering Committee</i>	2024
Funded to become primary maintainer of Biostrings, an open source R package with >1M downloads per year	
<b>University of Central Florida</b> , <i>Burnett Honors College</i>	2018
Funded to research novel approaches to incentivize exploration in evolutionary multi-agent systems	

## Publications

- Lakshman, A.** and E.S. Wright. "EvoWeaver: Large-scale prediction of gene functional associations from coevolutionary signals". *Nature Communications*, 2026. **(In Press)**.
- Lakshman, A.** and E.S. Wright. "ExoLabel: Scalable network clustering for massive datasets" **(In Preparation)**.

## Skills

- Programming (5+ years):** R, C, Fortran 90, Python
- Programming (2+ years):** C++, C#, Forth, Assembly