# aidan Lakshman

ahl27@pitt.edu • ahl27.com • 1 (724) 612 9940

#### **EDUCATION**

### University of Pittsburgh, School of Medicine

Doctor of Philosophy, Biomedical Informatics; expected graduation Summer 2025

Dissertation: Comparative genomic methods to reveal functional associations among proteins

# **University of Central Florida**

Bachelor of Science, Mathematics; magna cum laude, 2020

- Burnett Honors College
- National Merit Scholar

# WORK **EXPERIENCE**

# University of Pittsburgh, Pittsburgh, PA

Graduate Researcher, 2020 - 2025

- Designed novel algorithms to predict gene function using evolutionary signal; in review at Nature Biotechnology
- Optimized network clustering algorithms to process graphs with millions of nodes in constant memory complexity
- Created domain-specific network clustering algorithms to predict metabolic pathways from genome data
- Managed the Wright Lab's technical infrastructure, CI/CD pipelines, and code repositories
- Researched new approaches to infer causal relationships among variables in the presence of data missingness

# **Amazon Web Services**, Herndon, VA [Virtual]

Software Development Engineer Intern, Summer 2020 & 2021

- Led a team to implement a robust testing framework for Research Service Workbench on AWS (RSW)
- Streamlined RSW user experience by redesigning frontend components and building new backend infrastructure
- Implemented frontend components using React, backend components with Node.js and AWS Lambda

# Software Engineering Institute, CERT Division, Carnegie Mellon University

Data Science / Software Engineering Intern, Summer 2017

- Identified trends in malware execution behavior using Apache Spark and Python
- Developed a Python program to simulate web traffic and user activity for cyberdefense training environments

#### **GRANT FUNDING R Consortium**, Infrastructure Steering Committee

"Critical Updates to Biostrings", 2024 – 2025 [Award: \$8,000]

- Became the primary maintainer of Biostrings, an open source R package with >1M downloads per year
- Optimized internal methods, implemented CI/CD pipelines, handled bug reports, and added unit testing

# Carnegie Mellon University, Intelligent Coordination and Logistics Lab

Robotics Institute Summer Scholar, Summer 2018 [Award: \$5,250]

- Optimized traffic signal control algorithms with Bayesian hierarchical modelling to predict bus behavior
- Developed assistive technology for mobility impaired pedestrians using cellular and DSRC GPS data

# University of Central Florida, Evolutionary Computation Lab

Burnett Research Scholars Grant, 2018 – 2019 [Award: \$3,000]

Optimized embodied evolutionary robotic systems for multi-foraging problems by incentivizing exploration

# **SKILLS**

# **High Performance Computing**

- Over 3.5 million compute hours on HTCondor systems
- Passed AWS Cloud Practitioner Certification Exam (2020-2023)

# **Programming Languages**

- Expert proficiency: R (packages: Biostrings, SynExtend, froth; additional contributions to base R)
- Work Experience: C, Fortran, Python, JavaScript, Bash, PowerShell
- Other Experience: C#, Java, Haskell, Forth, Assembly (6502)

#### **Computer Engineering**

- Designed and built a cloud storage system with multiple layers of data redundancy
- Built a 6502 computer on a breadboard and developed a Forth OS from scratch in 6502-Assembly

#### **PUBLICATIONS**

Lakshman, Aidan and Wright, E.S. "EvoWeaver: Large-scale prediction of gene functional associations from coevolutionary signals" (Under Revision). *Nature Biotechnology*. [Preprint available on request] Lakshman, A., and Wright, E.S. "ExoLabel: Scalable network clustering for massive datasets" (In preparation).

SUNPERENCE  PRESENTATIONS   Predicting Gene Functional Associations from Coevolutionary Signals with EvoWeaver   Municipal, Canada well 2024   Community Detection for Extremely Large Networks   Salzburg, Austria   Municipal Community Detection for Extremely Large Networks   Salzburg, Austria   Municipal Community Detection for Large Networks   Salzburg, Bastburgh, PA   Organizer and co-chair for special session "Scalable Analysis for Big Biological Data"   RECOMB 2024   Pinsburgh, PA   Project Sprint 2023*   Project Sprint 2023*   Aug. 30 - Sept. 1, 2023   Cambridge, MA   Poster Presentation, won Best Poster award   Feroiert Sprint 2023*   Aug. 30 - Sept. 1, 2023   Cambridge, MA   Project Sprint 2023*   Aug. 30 - Sept. 1, 2023   Aug. 30 - Sept. 1, 2023   Protein Function from Coevolutionary Signal   Bioconductor 2022*   June 21-26, 2023   Albuquerque, NM   Informatics Promote of Prodein Functional Promote Protein Coevolution and Protein Functional Promote Protein Signal   Protein Functional Process   Seate Well Protein Functional Process   Seate Well Protein Functional Protein Coevolutionary Signal   June 21-26, 2023   June 24-28, 2022   Protein Functional Inference using Coevolutionary Signal   June 24-28, 2022   Protein Functional Inference using Coevolutionary Signal   June 24-28, 2022   Protein Functional Inference using Coevolutionary Signal   June 24-28, 2022   Protein Functional Protein Functional Association Networks   Buffalo, NY   Avaarded merit-based travel funding   Fall 2022   Avaarded merit-based travel funding   Fall 2021   Facching Assistant   Facching Assistant   Facching Assistant   Facching Assista			
useR! 2024 Community Detection for Extremely Large Networks Great Lakes Bioinformatics Conference Scalable Community Detection for Large Networks • Organizer and co-chair for special session "Scalable Analysis for Big Biological Data" • Poster Presentation, won Best Poster award  R Project Sprint 2023* • Refactored R's dendrapply function • Refactored R's dendrapply function  R Project Sprint 2023* • Refactored R's dendrapply function  R Project Sprint 2023* • Refactored R's dendrapply function  R Protein Function from Coevolutionary Signal  Bioconductor 2022* Protein Function from Coevolutionary Signal  Bioconductor 2022*  NSF Sponsored Workshop* • Led a two hour workshop (materials available at ahl27.com/tutorials)  **Spring Spring 4-28, 2022  **Detecting adaptive evolutionary sensits in genomes of polar species  **Evolution 2022*  **Protein Functional Inference using Coevolutionary Signal  **Nu.M Informatics Training Conference 2022  **Ensemble Methods Improve de novo Prediction of Protein Functional Association Networks  **Awarded merit-based travel funding  **Awarded merit-based travel funding  **Awarded merit-based travel funding  **Awarded merit-based travel funding  **Advisor*  **Mentored undergraduate students for a semester-long research internship program • Designed summer research projects for mentees • Gave lectures on intern cohort  **Mentored undergraduate students for a summer-long research internship program • Designed summer research projects for mentees • Gave lectures in intern cohort  R Programming for Scientific Research, Univ. Pittsburgh • Gave lectures in internship and the students for a summer-long research internship program • Designed summer research in Reprogramming for Scientific Research, Univ. Pittsburgh • Gave lectures in internship and the students for a summer-long research internship program • Designed summer research in Reprogramming • Gave lectures on indendergraduate students • Gave lectures on indendergraduate students • Gave lectures on indendergraduate students • Gave l			•
Great Lakes Bioinformatics Conference Scalable Community Detection for Large Networks  **Great Lakes Bioinformatics Conference Scalable Community Detection for Large Networks  **Onganizer and co-chair for special session "Scalable Analysis for Big Biological Data"  **RECOMB 2024 **EvolWeaver: Large-scale prediction of gene functional associations from coevolutionary signals  **Reproject Sprint 2023**  **Refactored R's dendrapply function  **Revolution 2023**  **Refactored R's dendrapply function  **Evolution 2023**  **Refactored R's dendrapply function  **Evolution 2023**  **Protein Function from Coevolutionary Signal  **Biocanductor 2022**  **Biocanductor 2022**  **Ison gonparative genomics to predict protein coevolution networks  **Led a two hour workshop (materials available at ahl27,com/tutorials)  **NSF Sponsored Workshop**  **Detecting adaptive evolutionary vents in genomes of polar species  **St. Augustine, FL  **Evolution 2022**  **Protein Functional Inference using Coevolutionary Signal  **NLM Informatics Training Conference 2022*  **Examble Methods Improve de novo Prediction of Protein Functional Association Networks  **Awarded merit-based travel funding  **TEACHING &**  **Advisor**  **Advisor**  **Advisor**  **Mentored undergraduate students for a semester-long research internship program  **Designed an individualized curriculum to teach R programming for Bioinformatics  **UPMC DDCF-UI Program  **Advisor**  **Mentored undergraduate students for a summer-long research internship program  **Designed an individualized curriculum to teach R programming for Bioinformatics  **UPMC DDCF-UI Program  **Advisor**  **Refored undergraduate students for a summer-long research internship program  **Designed an individualized curriculum to teach R programming for Bioinformatics  **UPMC DDCF-UI Program  **Advisor**  **Refactional seleval course in R programming  **Graduate level course in R p		useR! 2024	· · · · · · · · · · · · · · · · · · ·
Scalable Community Detection for Large Networks  ■ Organizer and co-chair for special session "Scalable Analysis for Big Biological Data"  RECOMB 2024  Evo Weaver: Large-scale prediction of gene functional associations from coevolutionary signals  ■ Poster Presentation, won Best Poster award  R Project Sprint 2023* ■ Refactored R's dendrapply function  Evolution 2023* ■ Refactored R's dendrapply function  Evolution 2023*  Protein Function from Coevolutionary Signal  Bioconductor 2022*  Using comparative genomics to predict protein coevolution networks ■ Led a two hour workshop (materials available at ahl27.com/tutorials)  NSF Sponsored Workshop*  Detecting adaptive evolutionary veents in genomes of polar species  Evolution 2022  Protein Functional Inference using Coevolutionary Signal  NLM Informatics Training Conference 2022  Protein Functional Inference using Coevolutionary Signal  NLM Informatics Training Conference 2022  Protein Functional Inference using Coevolutionary Signal  NLM Informatics Training Conference 2022  Protein Functional Inference using Coevolutionary Signal  TEACHING & ADVISING  Advisor  ■ Mentored undergraduate students for a semester-long research internship program ■ Designed an individualized curriculum to teach R programming for Bioinformatics  UPMC DDCF-UI Program  Advisor  ■ Mentored undergraduate students for a semester-long research internship program ■ Designed an individualized curriculum to teach R programming for Bioinformatics  UPMC DDCF-UI Program  Advisor  ■ Mentored undergraduate students for a summer-long research internship program ■ Designed an individualized curriculum to teach R programming for Bioinformatics  Programming for Scientific Research, Univ. Pittsburgh Fall 2021  Feaching Assistant  Graduate level course in R programming ■ Gave lectures to intern cohort  Graduate level course in R programming ■ Gave lectures, graded assignments, and wrote quizzes  Artificial Intelligence Club, Univ. Central Florida Director  Grave regular lectures on machine learning to cl		Community Detection for Extremely Large Networks	•
RECOMB 2024 REVOWEaver: Large-scale prediction of gene functional associations from coevolutionary signals Poster Presentation, won Best Poster award R Project Sprint 2023* Refeactored R's dendrapply function Releatoried R's dendrapply function Coventry, UK Evolution 2023* Protein Function from Coevolutionary Signal Bioconductor 2022* USing comparative genomics to predict protein coevolution networks Led a two hour workshop (materials available at ahl27.com/tutorials) NSF Sponsored Workshop* Detecting adaptive evolutionary signal RUMInformatics Training Conference 2022 Ensemble Methods Improve de novo Prediction of Protein Functional Association Networks *Awarded merit-based travel funding  TEACHING & ADVISING  Windergraduate Mentor Advisor Mentored undergraduate students for a semester-long research internship program Designed an individualized curriculum to teach R programming for Bioinformatics UPMC DDCF-UI Program Advisor Mentored undergraduate students for a summer-long research internship program Designed summer research projects for mentees Gave lectures to intem cohort  R Programming for Scientific Research, Univ. Pittsburgh Reaching Assistant Graduate level course in R programming Graduate level cou		Great Lakes Bioinformatics Conference	May 13-16, 2024
EvolWeaver: Large-scale prediction of gene functional associations from coevolutionary signals  R Project Sprint 2023* Refactored R's dendrapply function  Evolution 2023* Protein Function from Coevolutionary Signal  Bioconductor 2022* Using comparative genomics to predict protein coevolution networks Let a two hour workshop (materials available at ahl27.com/tutorials)  NSF Sponsored Workshop* Detecting adaptive evolutionary events in genomes of polar species  Evolution 2022 Protein Functional Inference using Coevolutionary Signal  NLM Informatics Training Conference 2022 Ensemble Methods Improve de novo Prediction of Protein Functional Association Networks  *Awarded merit-based travel funding  TEACHING & ADVISING  Advisor  I Mentored undergraduate students for a semester-long research internship program Designed an individualized curriculum to teach R programming for Bioinformatics UPMC DDCF-UI Program Advisor Mentored undergraduate students for a summer-long research internship program Designed an individualized curriculum to teach R programming for Bioinformatics R Programming for Scientific Research, Univ. Pittsburgh Reaching Assistant Graduate level course in R programming Gave lectures, graded assignments, and wrote quizzes Artificial Intelligence Club, Univ. Central Florida Director Gave regular lectures on machine learning to classes of >30 undergraduates Led several journal clubs for undergraduates			Pittsburgh, PA
■ Poster Presentation, won Best Poster award  R Project Sprint 2023* ■ Refactored R's dendrapply function  Evolution 2023* Protein Function from Coevolutionary Signal  Bioconductor 2022* Using comparative genomics to predict protein coevolution networks ■ Led a two hour workshop (materials available at ahl27.com/tutorials)  NSF Sponsored Workshop* Detecting adaptive evolutionary events in genomes of polar species  Evolution 2022 Protein Functional Inference using Coevolutionary Signal  NLM Informatics Training Conference 2022 Ensemble Methods Improve de novo Prediction of Protein Functional Association Networks  *Awarded merit-based travel funding  TEACHING & Advisor  TEACHING & Advisor  ■ Mentored undergraduate students for a semester-long research internship program ■ Designed an individualized curriculum to teach R programming for Bioinformatics  UPMC DDCF-UI Program  Advisor  ■ Mentored undergraduate students for a summer-long research internship program ■ Designed an individualized curriculum to teach R programming for Bioinformatics  UPMC DDCF-UI Program  Advisor  ■ Mentored undergraduate students for a summer-long research internship program ■ Designed summer research projects for mentees ■ Gave lectures to intern cohort  R Programming for Scientific Research, Univ. Pittsburgh Teaching Assistant  ■ Graduate level course in R programming ■ Gave lectures, graded assignments, and wrote quizzes  Artificial Intelligence Club, Univ. Central Florida Director ■ Gave regular lectures on machine learning to classes of >30 undergraduates ■ Led several journal clubs for undergraduates students ■ Gave lectures on machine learning to classes of >30 undergraduates ■ Gave lectures on machine learning to classes of >30 undergraduates ■ Led several journal clubs for undergraduates students		RECOMB 2024	Apr. 29 - May 2, 2024
■ Refactored R's dendrapply function  Evolution 2023* Protein Function from Coevolutionary Signal  Bioconductor 2022* Using comparative genomics to predict protein coevolution networks ■ Led a two hour workshop (materials available at ahl27.com/tutorials)  NSF Sponsored Workshop* Detecting adaptive evolutionary events in genomes of polar species  Evolution 2022 Protein Functional Inference using Coevolutionary Signal  NLM Informatics Training Conference 2022 Ensemble Methods Improve de novo Prediction of Protein Functional Association Networks  *Awarded merit-based travel funding  TEACHING & Advisor  THACHING & ADVISING  *Mentored undergraduate students for a semester-long research internship program ■ Designed an individualized curriculum to teach R programming for Bioinformatics  *UPMC DDCF-UI Program Advisor  *Mentored undergraduate students for a summer-long research internship program ■ Designed summer research projects for mentees ■ Gave lectures to intern cohort  R Programming for Scientific Research, Univ. Pittsburgh Teaching Assistant  ■ Graduate level course in R programming ■ Grave lectures, graded assignments, and wrote quizzes  Artificial Intelligence Club, Univ. Central Florida Director  ■ Gave regular lectures on machine learning to classes of >30 undergraduates ■ Gave regular lectures on machine learning to classes of >30 undergraduates ■ Gave regular lectures on machine learning to classes of >30 undergraduates ■ Gave regular lectures on machine learning to classes of >30 undergraduates ■ Gave regular lectures on machine learning to classes of >30 undergraduates ■ Gave regular lectures on machine learning to classes of >30 undergraduates ■ Gave regular lectures on machine learning to classes of >30 undergraduates ■ Led several journal clubs for undergraduate students			Cambridge, MA
Evolution 2023* Protein Function from Coevolutionary Signal Bioconductor 2022* Using comparative genomics to predict protein coevolution networks Led a two hour workshop (materials available at ahl27.com/tutorials)  NSF Sponsored Workshop* Detecting adaptive evolutionary events in genomes of polar species Evolution 2022 Protein Functional Inference using Coevolutionary Signal  NLM Informatics Training Conference 2022 Protein Functional Inference using Coevolutionary Signal  NLM Informatics Training Conference 2022 Ensemble Methods Improve de novo Prediction of Protein Functional Association Networks *Awarded merit-based travel funding  TEACHING & ADVISING  Undergraduate Mentor Advisor  Mentored undergraduate students for a semester-long research internship program Designed an individualized curriculum to teach R programming for Bioinformatics  UPMC DDCF-UI Program Advisor  Mentored undergraduate students for a summer-long research internship program Designed summer research projects for mentees Gave lectures to intern cohort  R Programming for Scientific Research, Univ. Pittsburgh Teaching Assistant Graduate level course in R programming Graduate Sudents  Artificial Intelligence Club, Univ. Central Florida D		R Project Sprint 2023*	Aug. 30 - Sept. 1, 2023
Protein Function from Coevolutionary Signal  Bioconductor 2022* Using comparative genomics to predict protein coevolution networks  * Led a two hour workshop (materials available at ahl27.com/tutorials)  NSF Sponsored Workshop* Detecting adaptive evolutionary events in genomes of polar species Detecting adaptive evolutionary events in genomes of polar species St. Augustine, FL.  Evolution 2022 Protein Functional Inference using Coevolutionary Signal  NLM Informatics Training Conference 2022 Ensemble Methods Improve de novo Prediction of Protein Functional Association Networks Buffalo, NY  *Awarded merit-based travel funding  TEACHING & Advisor  Mentored undergraduate students for a semester-long research internship program Designed an individualized curriculum to teach R programming for Bioinformatics  UPMC DDCF-UI Program Advisor  Mentored undergraduate students for a summer-long research internship program Designed summer research projects for mentees Gave lectures to intern cohort  R Programming for Scientific Research, Univ. Pittsburgh Teaching Assistant  Gave lectures, graded assignments, and wrote quizzes  Artificial Intelligence Club, Univ. Central Florida Director  Gave regular lectures on machine learning to classes of >30 undergraduates  Led several journal clubs for undergraduate students  Gave regular lectures on machine learning to classes of >30 undergraduates  Led several journal clubs for undergraduate students		■ Refactored R's <b>dendrapply</b> function	Coventry, UK
Bioconductor 2022* Using comparative genomics to predict protein coevolution networks  Led a two hour workshop (materials available at ahl27.com/tutorials)  NSF Sponsored Workshop* Detecting adaptive evolutionary events in genomes of polar species  Evolution 2022 Protein Functional Inference using Coevolutionary Signal  NLM Informatics Training Conference 2022 Ensemble Methods Improve de novo Prediction of Protein Functional Association Networks  *Awarded merit-based travel funding  TEACHING & ADVISING  Undergraduate Mentor Advisor  Mentored undergraduate students for a semester-long research internship program Designed an individualized curriculum to teach R programming for Bioinformatics  UPMC DDCF-UI Program Advisor  Mentored undergraduate students for a summer-long research internship program Designed summer research projects for mentees Gave lectures to intern cohort  R Programming for Scientific Research, Univ. Pittsburgh Teaching Assistant Graduate level course in R programming Grave lectures, graded assignments, and wrote quizzes  Artificial Intelligence Club, Univ. Central Florida Director Gave regular lectures on machine learning to classes of >30 undergraduates Led several journal clubs for undergraduate students Gave regular lectures on machine learning to classes of >30 undergraduates Led several journal clubs for undergraduate students			
Using comparative genomics to predict protein coevolution networks  • Led a two hour workshop (materials available at ahl27.com/tutorials)  NSF Sponsored Workshop* Detecting adaptive evolutionary events in genomes of polar species  Evolution 2022 Protein Functional Inference using Coevolutionary Signal  NLM Informatics Training Conference 2022 Ensemble Methods Improve de novo Prediction of Protein Functional Association Networks  *Awarded merit-based travel funding  TEACHING & Advisor  Mentored undergraduate tsudents for a semester-long research internship program  Designed an individualized curriculum to teach R programming for Bioinformatics  UPMC DDCF-UI Program  Advisor  Mentored undergraduate students for a summer-long research internship program  Designed summer research projects for mentees  Gave lectures to intern cohort  R Programming for Scientific Research, Univ. Pittsburgh Teaching Assistant  Graduate level course in R programming Grave lectures, graded assignments, and wrote quizzes  Artificial Intelligence Club, Univ. Central Florida Director  Gave regular lectures on machine learning to classes of >30 undergraduates  Led several journal clubs for undergraduate students		Protein Function from Coevolutionary Signal	Albuquerque, NM
* Led a two hour workshop (materials available at ahl27.com/tutorials)  NSF Sponsored Workshop* Detecting adaptive evolutionary events in genomes of polar species  St. Augustine, FL.  Evolution 2022 Protein Functional Inference using Coevolutionary Signal  NLM Informatics Training Conference 2022 Ensemble Methods Improve de novo Prediction of Protein Functional Association Networks  *Awarded merit-based travel funding  TEACHING & ADVISING  Undergraduate Mentor Advisor  Mentored undergraduate students for a semester-long research internship program Designed an individualized curriculum to teach R programming for Bioinformatics  UPMC DDCF-UI Program Advisor  Mentored undergraduate students for a summer-long research internship program Designed summer research projects for mentees Gave lectures to intern cohort  R Programming for Scientific Research, Univ. Pittsburgh Teaching Assistant Graduate level course in R programming Grave lectures, graded assignments, and wrote quizzes  Artificial Intelligence Club, Univ. Central Florida Director Gave regular lectures on machine learning to classes of >30 undergraduates Led several journal clubs for undergraduate students			July 27-29, 2022
NSF Sponsored Workshop* Detecting adaptive evolutionary events in genomes of polar species  Evolution 2022 Protein Functional Inference using Coevolutionary Signal  NLM Informatics Training Conference 2022 Ensemble Methods Improve de novo Prediction of Protein Functional Association Networks  *Awarded merit-based travel funding  TEACHING & Advisor  Mentored undergraduate students for a semester-long research internship program Designed an individualized curriculum to teach R programming for Bioinformatics  UPMC DDCF-UI Program Advisor  Mentored undergraduate students for a summer-long research internship program Designed summer research projects for mentees Gave lectures to intern cohort  R Programming for Scientific Research, Univ. Pittsburgh Teaching Assistant Graduate level course in R programming Gave lectures, graded assignments, and wrote quizzes  Artificial Intelligence Club, Univ. Central Florida Director Gave regular lectures on machine learning to classes of >30 undergraduates Led several journal clubs for undergraduate students			Seattle, WA
Detecting adaptive evolutionary events in genomes of polar species  Evolution 2022 Protein Functional Inference using Coevolutionary Signal  NLM Informatics Training Conference 2022 Ensemble Methods Improve de novo Prediction of Protein Functional Association Networks  *Awarded merit-based travel funding  TEACHING & Undergraduate Mentor Advisor  Mentored undergraduate students for a semester-long research internship program Designed an individualized curriculum to teach R programming for Bioinformatics  UPMC DDCF-UI Program Advisor  Mentored undergraduate students for a summer-long research internship program Designed summer research projects for mentees Gave lectures to intern cohort  R Programming for Scientific Research, Univ. Pittsburgh Teaching Assistant Graduate level course in R programming Gave lectures, graded assignments, and wrote quizzes  Artificial Intelligence Club, Univ. Central Florida Director Gave regular lectures on machine learning to classes of >30 undergraduates Led several journal clubs for undergraduate students		• • • • • • • • • • • • • • • • • • • •	Il 25 26 2022
Protein Functional Inference using Coevolutionary Signal  NLM Informatics Training Conference 2022 Ensemble Methods Improve de novo Prediction of Protein Functional Association Networks  *Awarded merit-based travel funding  TEACHING & ADVISING  Undergraduate Mentor Advisor  Mentored undergraduate students for a semester-long research internship program Designed an individualized curriculum to teach R programming for Bioinformatics  UPMC DDCF-UI Program Advisor  Mentored undergraduate students for a summer-long research internship program Designed summer research projects for mentees Gave lectures to intern cohort  R Programming for Scientific Research, Univ. Pittsburgh Teaching Assistant Graduate level course in R programming Gave lectures, graded assignments, and wrote quizzes  Artificial Intelligence Club, Univ. Central Florida Director  Gave regular lectures on machine learning to classes of >30 undergraduates Led several journal clubs for undergraduate students			•
NLM Informatics Training Conference 2022 Ensemble Methods Improve de novo Prediction of Protein Functional Association Networks *Awarded merit-based travel funding  TEACHING & ADVISING  Undergraduate Mentor Advisor  • Mentored undergraduate students for a semester-long research internship program • Designed an individualized curriculum to teach R programming for Bioinformatics  UPMC DDCF-UI Program Advisor  • Mentored undergraduate students for a summer-long research internship program • Designed summer research projects for mentees • Gave lectures to intern cohort  R Programming for Scientific Research, Univ. Pittsburgh Teaching Assistant • Graduate level course in R programming • Gave lectures, graded assignments, and wrote quizzes  Artificial Intelligence Club, Univ. Central Florida Director • Gave regular lectures on machine learning to classes of >30 undergraduates • Led several journal clubs for undergraduate students		Evolution 2022	June 24-28, 2022
Ensemble Methods Improve de novo Prediction of Protein Functional Association Networks  *Awarded merit-based travel funding  TEACHING & Advisor  • Mentored undergraduate students for a semester-long research internship program • Designed an individualized curriculum to teach R programming for Bioinformatics  UPMC DDCF-UI Program  Advisor  • Mentored undergraduate students for a summer-long research internship program • Designed summer research projects for mentees • Gave lectures to intern cohort  R Programming for Scientific Research, Univ. Pittsburgh Teaching Assistant • Graduate level course in R programming • Gave lectures, graded assignments, and wrote quizzes  Artificial Intelligence Club, Univ. Central Florida Director • Gave regular lectures on machine learning to classes of >30 undergraduates • Led several journal clubs for undergraduate students		Protein Functional Inference using Coevolutionary Signal	Cleveland, OH
TEACHING & Advisor  Mentored undergraduate students for a semester-long research internship program Designed an individualized curriculum to teach R programming for Bioinformatics  UPMC DDCF-UI Program Advisor  Mentored undergraduate students for a summer-long research internship program Designed summer research projects for mentees Gave lectures to intern cohort  R Programming for Scientific Research, Univ. Pittsburgh Teaching Assistant Gave lectures, graded assignments, and wrote quizzes  Artificial Intelligence Club, Univ. Central Florida Director Gave regular lectures on machine learning to classes of >30 undergraduates Led several journal clubs for undergraduate students			
ADVISING  Advisor  Mentored undergraduate students for a semester-long research internship program Designed an individualized curriculum to teach R programming for Bioinformatics  UPMC DDCF-UI Program Advisor  Mentored undergraduate students for a summer-long research internship program Designed summer research projects for mentees Gave lectures to intern cohort  R Programming for Scientific Research, Univ. Pittsburgh Teaching Assistant Graduate level course in R programming Gave lectures, graded assignments, and wrote quizzes  Artificial Intelligence Club, Univ. Central Florida Director Gave regular lectures on machine learning to classes of >30 undergraduates Led several journal clubs for undergraduate students		*Awarded merit-based travel funding	
<ul> <li>Designed an individualized curriculum to teach R programming for Bioinformatics</li> <li>UPMC DDCF-UI Program         <ul> <li>Advisor</li> </ul> </li> <li>Mentored undergraduate students for a summer-long research internship program</li> <li>Designed summer research projects for mentees</li> <li>Gave lectures to intern cohort</li> <li>R Programming for Scientific Research, Univ. Pittsburgh</li></ul>			Fall 2022
Advisor  Mentored undergraduate students for a summer-long research internship program Designed summer research projects for mentees Gave lectures to intern cohort  R Programming for Scientific Research, Univ. Pittsburgh Teaching Assistant Graduate level course in R programming Gave lectures, graded assignments, and wrote quizzes  Artificial Intelligence Club, Univ. Central Florida Director Gave regular lectures on machine learning to classes of >30 undergraduates Led several journal clubs for undergraduate students			
<ul> <li>Designed summer research projects for mentees</li> <li>Gave lectures to intern cohort</li> <li>R Programming for Scientific Research, Univ. Pittsburgh         Teaching Assistant</li> <li>Graduate level course in R programming</li> <li>Gave lectures, graded assignments, and wrote quizzes</li> <li>Artificial Intelligence Club, Univ. Central Florida         Director</li> <li>Gave regular lectures on machine learning to classes of &gt;30 undergraduates</li> <li>Led several journal clubs for undergraduate students</li> </ul>		<u> </u>	Summer 2022
Teaching Assistant  ■ Graduate level course in R programming ■ Gave lectures, graded assignments, and wrote quizzes  Artificial Intelligence Club, Univ. Central Florida 2018 – 2020  Director ■ Gave regular lectures on machine learning to classes of >30 undergraduates ■ Led several journal clubs for undergraduate students		<ul> <li>Designed summer research projects for mentees</li> </ul>	
<ul> <li>Gave lectures, graded assignments, and wrote quizzes</li> <li>Artificial Intelligence Club, Univ. Central Florida         Director         Gave regular lectures on machine learning to classes of &gt;30 undergraduates         Led several journal clubs for undergraduate students     </li> </ul>			Fall 2021
<ul> <li>Director</li> <li>Gave regular lectures on machine learning to classes of &gt;30 undergraduates</li> <li>Led several journal clubs for undergraduate students</li> </ul>			
<ul> <li>Led several journal clubs for undergraduate students</li> </ul>		S ·	2018 – 2020
		<ul> <li>Led several journal clubs for undergraduate students</li> </ul>	