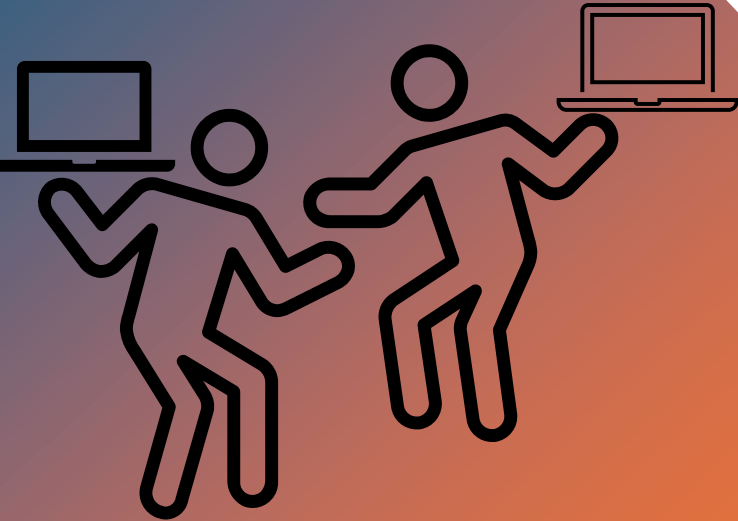


Summer 2025 Intern + Research Project



- Introduction & Kickoff Meeting
- Wednesday, June 4, 2025

Introductions

- Name
- Interests (academic, hobbies, and/or favorite quote)?
- What skills/experience you'd like to gain from our project?

Hello

My name is

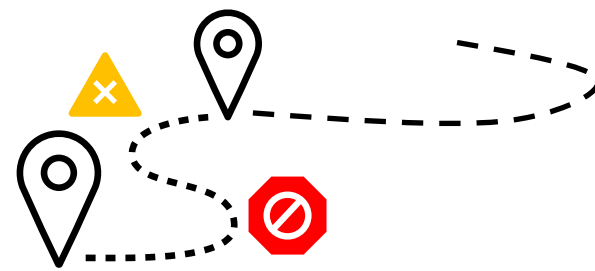
Justin Wilson

- I like **technology** and **working with others**
- I want to **learn** and **share** this research to with students from diverse backgrounds
- One of my favorite quotes,

"It takes less time to do a thing right than to explain why you did it wrong"

Henry Wadsworth Longfellow

About Me



4 years

High School

JHU



- Dundalk High School
- Baltimore, MD



JOHNS HOPKINS
UNIVERSITY

- Johns Hopkins University
- High School Math Scholar
- Senior Year
- Baltimore, MD

4 years

Undergraduate

Intern



LEHIGH
UNIVERSITY

- Lehigh University (LU)
- Major: Integrated Business and Engineering (IBE)
- Electrical Engineering
- Bethlehem, PA



- General Motors
- Warren, MI

LOCKHEED MARTIN

- Lockheed Martin
- King of Prussia, PA

9 years

Startup

Industry

psyleron

- Psyleron
- Product Mgr
- Princeton, NJ



- ZS Associates
- Business Info Specialist
- Princeton, NJ

AstraZeneca



MedImmune

- MedImmune / AstraZeneca
- Sales Force Effectiveness
- Gaithersburg, MD

9 years

Grad

Industry



THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL

- UNC Chapel Hill
- Major: Computer Science ([My URL](#))
- Chapel Hill, NC

MITRE

- Data Scientist
- McLean, VA



leidos

- Research Scientist
- Reston, VA



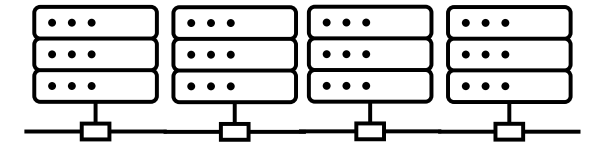
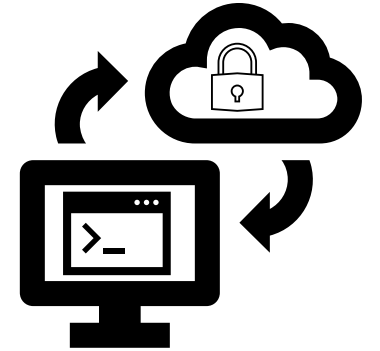
- George Mason Univ
- Adjunct Professor

My Previous Research and Projects

- Demos

About the Project ([Google Doc](#), [Project URL](#))

- Learn [Amazon Web Services \(AWS\)](#), [cloud computing](#), & [cybersecurity](#) best practices
- Create and monitor CPU and memory usage of a multi-node RKE2 [Kubernetes \(k8s\)](#) cluster
- Code and deploy a custom [Python](#) application with [Docker](#)



Why do you think this project will be useful to you and for different types of majors?

Reminders

- This is an intern project, not a class
 - Ask questions, research, and search for information in addition to our weekly meetings
- These research topics are relevant today
 - It is ok and expected that you may not have heard about these topics or technologies yet; we are introducing them to you here
- How do I get help? Any video tutorials?
 - Yes videos (~30 min/week) and email anytime (jwilso86@gmu.edu) for virtual office hours



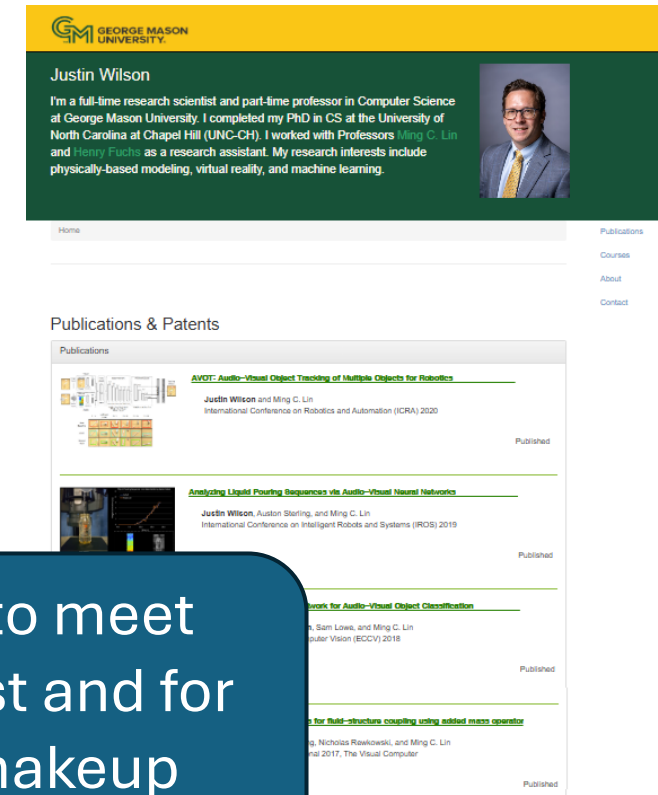
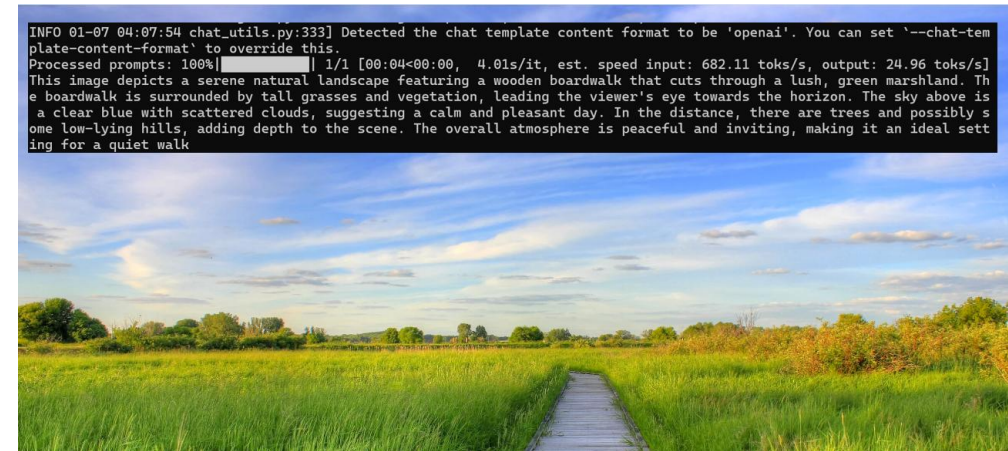
We are a team!

Can a project be hard and fun at the same time? Yes, with the right support!

Tentative Schedule

Project Week	Research Topic for Internship	Skills
1 (Wed, June 4)	Kickoff, Intro, and Access AWS	AWS
2 (Wed, June 11)	Access AWS EC2 instances & GitHub	Git
3 (Wed, June 18)	Create RKE2 Kubernetes (k8s) cluster	Kubernetes (k8s)
4 (Wed, June 25)	Develop Python application	Python/Copilot
5 (Wed, July 2)	Deploy application on RKE2 in AWS	Docker
6 (Wed, July 9)	Holiday, Summer Break, or Optional	ML/vLLM/GPU
7 (Wed, July 16)	Complete project, AWS course, & resume	Completion
8 (Wed, July 23)	Intern Presentations	✓

- Optional (Stretch Goals!)
 - Train/deploy a **machine learning** model
 - Create a **website** for your project
 - Certify AWS Cloud Practitioner **exam**



I'm happy to meet upon request and for planned makeup sessions

Questions?

- Demos
 - [My URL](#), [Project URL](#)
- Week #1 To Do's
 - [Google Doc](#)
- Let's get started!
 - Our objective is to have fun, learn, and gain valuable hands-on experience together in cloud computing for different majors