

Summer 2026 Intern Presentations

Collated by Justin Wilson

Project Overview

By Anuska Subedi

- In this internship I learned about Amazon Web Services (AWS), cloud computing, launching instances, navigating Github and cybersecurity best practices.
- Explored additional learning opportunities, including creating a website and materials to prepare for the AWS certification.



What I liked!

- I liked that the internship provided optional tasks for students who wanted to challenge themselves and explore more. The extra projects, such as creating a website, allowed me to apply my skills creatively and learn beyond the required tasks.
- I enjoyed learning new tools and technologies that I had not worked with before, such as AWS, Ubuntu, and cloud instances.



Summer Research Project: Asim Simkhada

Deploying a Python Application on Kubernetes (AWS RKE2)

- Created a Python application that retrieves quotes from the ZenQuotes API.
- Deployed the application on a Kubernetes (RKE2) cluster running on AWS EC2.
- Used Git and GitHub to manage code and submit a Pull Request.



Amazon
EC2



What I Learned



Skills & Experience Gained

- Learned how to launch and manage AWS EC2 instances.
- Deployed applications using Kubernetes.
- Used kubectl to monitor pods and troubleshoot deployments.
- Improved my Git and GitHub workflow using branches, commits, and pull requests.
- Gained hands-on experience with Linux and SSH.
- Making a website

What I Liked & Challenges

What I Liked

- Hands-on experience with cloud technologies.
- Learning Docker and Kubernetes.
- Seeing my application successfully run on AWS.



Challenges

- Learning multiple new technologies in a short amount of time.
- Balancing this internship with another internship



By Cathy

Overview/What I Learned

- Created and managed virtual machines using AWS
- Learned basic Linux commands
- Developed Python applications
- Used GitHub to manage branches and pull requests
- Create a Docker container for our Python application



Enjoyed

I loved how I was able to gain exposure on technologies that I hadn't worked with before. It helped to build technicals skills with hands-on assignments instead of just reading about them. I wasn't familiar with cloud computing or a lot of the tools that we had to use during the past few weeks, so it was interesting to learn about basic Python programming, using Github for collaboration, and getting to know Docker and Kubernetes.

Challenges

The biggest challenge for me was that a lot of the concepts were completely new to me. I had to spend extra time searching up terminology and going through trial and error to get the program to actually run correctly.

About the Project

By Eileen

- Learned AWS cloud services (EC2, IAM, S3, security)
- Developed a Python application
- Used Git/GitHub for version control
- Worked with Linux and SSH
- Containerized apps with Docker and deployed applications on Kubernetes (RKE2)
- Completed AWS Cloud Practitioner Essentials

Likes and Dislikes

What I enjoyed:

- Learned a lot of new skills, including how to set up and run an instance
- I got to explore a lot of different techniques and platforms that I wasn't previously very experienced in

What I didn't enjoy:

- Wasn't aware that the python application wouldn't work if I tried to code with a chromebook and had to adjust to that
- A lot of information in short classes and was sometimes lost because I wasn't very familiar with a lot of these topics before this internship

By Johan

Project Overview

- Created AWS EC2 Instances with security groups, SSH inbound rules, and elastic IP addresses
- Applied MFA to our AWS accounts
- Deployed Python on Visual Studio
- Created an EC2 Agent instance
- Used Command Prompt terminal to access and run code on our instances
- Used Github to create branches, commit code, pushed files, and created pull requests





What I Learned

Command Prompt: How to connect to EC2 instances from the terminal, how to perform specific commands with scripts, and change between modes (E.g: insert mode)

EC2: Rented AWS cloud servers (t2.xlarge) to run the project

RKE2: The specific Kubernetes we installed. Consists of a server node and an agent node.

- How to edit security groups to have access to only my IP
- Learned how to create branches, commit changes, and push code to a remote repository on Github
- Learned how to write a manifest.yaml file, deploy it with kubectl apply, and check it using kubectl logs.

Likes/Dislikes

Likes

Weekly videos: Helped guide me through the steps of the project when I was stuck or unsure of what to do.

Optional/Mandatory: Since computer science is new to me, allowed me to spend more time on the more important tasks than to overreach on optional concepts.

Format: I found the weekly schedule's workload to be manageable and the weekly meeting time was consistent and reasonably long enough to cover everything while avoiding redundancy.

Dislikes

Clarity (nitpicked): Was sometimes confused on what certain scripts did on the command prompt or on Visual Studio



Joonhyeok Her

Summer Internship with Professor Justin
Wilson from GMU Computer Science



What Was The Internship About

This internship was about learning how to manage server systems and deployed RKE2 cluster along with how to use related systems such as AWS and GitHub.

I also learned how to manage my cybersecurity such as MFA and IAM users. SSH was also another factor that only allows certain IP to connect.

What I Learned & Liked From This Internship, Also What I Disliked

I have learned how to manage and start EC2 instances and how to deploy RKE2 cluster using the instance.

I liked the challenging problems that required me to find solution to it rather than just being given to me at the first place.

I had some challenges finding resources and managing my time.



Summer 2026 Cloud Computing Internship

By: Liam Kim



What was the project?

- Created AWS EC2 cloud servers
- Connected to the servers using SSH
- Practiced Linux
- Used GitHub to save, organize, and submit code
- Created a Python quotes application
- Used Docker and Kubernetes to run the app in the cloud
- Completed AWS Cloud Practitioner course modules





What I Liked and Learned

What I liked:

- The project was hands on
- I got to use real cloud computing tools
- It was rewarding to see my application work

What I learned:

- How AWS cloud servers work
- How to use GitHub
- How to create and use an AWS EC2 server



What Was Difficult?

Some instructions had many steps and were hard to follow

Small command or setup mistakes could cause errors

Connecting the servers and setting up Kubernetes was confusing at first

Troubleshooting could be frustrating and time consuming





Resume

Liam Kim

Fairfax, VA elliamik@gmail.com, elliamik

Oakton High School, Rising Senior, 3.85 GPA

LEADERSHIP & ATHLETICS

Captain of Boys Volleyball

2x District Champion 1x Region Champ

Varsity Track and Field Captain: Qualified for VHSL State Championship many times, along with New balance nationals as well. State Champion in the 4x100 relay.



By Seungtae

Summer Internship Project

Project

In the summer internship project, I learned about cloud engineering. I learned about running EC2 instances and kubernetes clusters. I also learned how to use AWS and Github. Another thing I learned is about SSH



Summer project

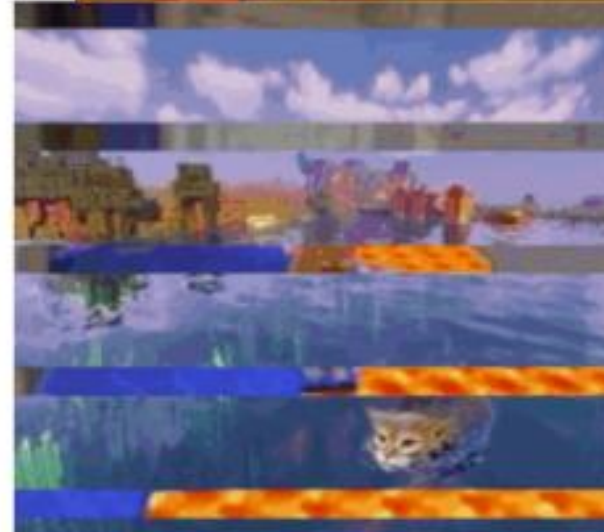
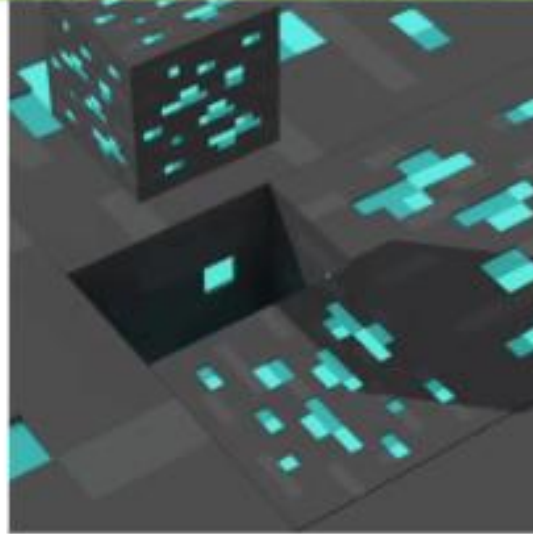
2026

By shiwoo



What about

Coding
stuff, installing
docker, launching
stuff, and
github, and
enabling MFA.



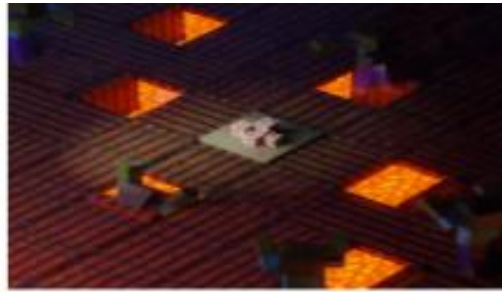
What I liked

Homework, and running instances



What I didn't like

nothing



Crafting



My Honest Reaction:



THE END.



Jack Black every 10 minutes: "Creeper! Oh man... I feel a song coming on! Hit it, Garret!"

