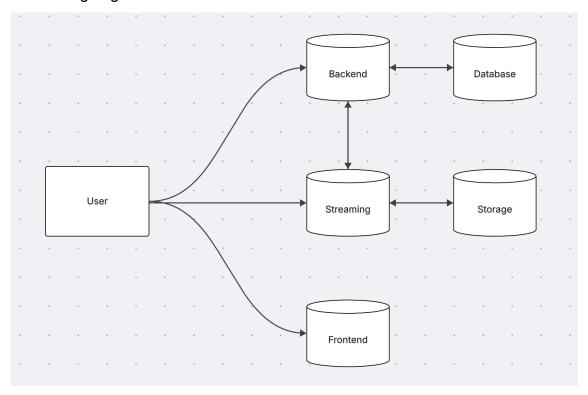
Cloud Nine

Group Members: Zaki Baker Javon, David Carangan, Jordan Finch, Jack Goehringer, Jeffrey Kjelstrom

Chapter 1: The vision

This project is designed to provide a service not too dissimilar from other services that exist today. This will be developed more as a proof of concept. We will be designing and implementing a form of streaming service that utilizes the pod structure using kubernetes. It will be a simplified version of existing services, with exclusive streaming selections due to certain limitations. In doing so, we hope to be able to eventually expand the service for personal uses or, if feasible, possibly even commercial use. Rather than rely on other streaming services which seek to remove ownership over shows and movies that have been paid for, we want to be able to maintain ownership over said movies and shows while not having to rely on physical media such as cd's, dvd's and the likes while still being able to watch them from anywhere and everywhere. We want to put our money where our mouth is and provide a better, more ethical service than the predatory business practices of existing competitors.

Here we have a simplified diagram depicting the overall architecture of how our service is going to function:



To put it simply, the architecture of this project consists of several different pods, each with their own specialized functionality. The first one to bring up is the Frontend pod, which will be responsible for allowing the user to interact with each of the other pods. Next are the streaming pod and the storage pod. The storage pod is the main limiting factor as it will be where the movies and shows will be located, and the size of which determines what shows and movies are able to be stored. The streaming pod will be responsible for handling the movement of files and carry out commands put in by the user. It will first receive instructions from the frontend pod when the user selects a show or movie to watch. It will then retrieve the selected media from the storage pod to send back to the frontend pod for the user's viewing pleasure. We will also add in a backend pod with a database connected to it. This is for miscellaneous data that may need to be saved, like the history of instructions or something along those lines. While it may seem entirely unnecessary, it is in fact there for efficiency rather than for necessity. The backend pod exists to share the workload of the streaming pod to prevent overloading the streaming pod.

Chapter 2: The plan

To implement our plan, we decided to go with systems that we had previously used in past projects and in class examples. Starting off with the simplest pod, the frontend will be implemented as a NodePort running a NGINX server that serves the static files to the frontend. The static files will have code that will be able to connect them to the next pod, the backend. This pod will also need to be a NodePort running a Node.js server that will provide the API endpoints for the front end. This pod will be connected to a database server running PostgreSQL. We chose this style of database due to its extensive query language and ability to create complex data relationships.

Moving on to streaming, like mentioned in the previous chapter, the actual streaming is handled separately from the database and backend queries. The pod managing the streaming will have three connections, the frontend, backend, and a new pod for storage. The streaming pod will be NodePort for the same reasons as the frontend and backend. This pod will also have two containers, one for transcoding the

video data, and one for managing the connection and data in storage. The first container for transcoding will run FFmpeg. This will allow the videos/movies to be broken down into more usable chunks that are better for streaming. After transcoding, the data is transferred through the second container that will add the data to the storage via the storage pod. The video's information data will also be transferred to the backend pod, which will store the data in the database for future retrieval by the user. The second container will also act as a liaison for the front end to retrieve chunks from the storage to stream to the user. To top it all off, the storage pod will have a container running MinIO. This program will allow us to easily store video chunks and versions in a way that works nicely with streaming. The MinIO container will also be connected to persistent storage.

Zaki Baker

2812 west 10th street

Chester, Pennsylvania 19013 United States

Day Phone: 6108007863 Email: zakib514@gmail.com

Desired locations:

Philadelphia, Pennsylvania, United States

Work experience:

school bus operator class b krapf School Bus. (part-time basis)

1060 Saunders Lane West Bradford, PA

2/2024 - 2/2025

Salary: \$19,000.00 USD Per Year

Hours per week: 30

Duties, Accomplishments and Related Skills:

Job Overview:

Krapf School Bus is seeking responsible and dedicated School Bus Drivers to safely transport students to and from school, field trips, and other activities. As a Krapf School Bus Driver, you will be a vital part of the community, ensuring the safety and well-being of children during their daily commutes. The ideal candidate has a clean driving record, a calm demeanor, and a commitment to safety and customer service.

Key Responsibilities:

Safely operate a school bus to transport students between designated pick-up and drop-off locations.

Adhere to all traffic laws, safety regulations, and Krapf operational policies.

Conduct pre-trip and post-trip vehicle inspections to ensure buses are in proper working condition.

Monitor and assist students during boarding, riding, and exiting the bus to maintain order and safety.

Communicate with school personnel, parents, and transportation staff regarding delays, incidents, or schedule changes.

Report mechanical issues, accidents, or violations to the transportation supervisor immediately.

Maintain accurate and timely records of routes, schedules, and student attendance.

Follow designated routes and schedules, adjusting for weather or road conditions as needed.

Support students with special needs, ensuring safe and comfortable transportation.

Qualifications:

Valid CDL (Commercial Driver's License) with a School Bus (S) and Passenger (P) endorsement.

CBRN Decontamination Specialist CERFP(pennslyvania national guard(35th cerfp)

BLDG 3-91 FORT INDIANTOWN GAP Annville, PA

1/2022 - 2/2026

Salary: \$1,000.00 USD Per Year

Hours per week: 40

Duties, Accomplishments and Related Skills:

Job Title: Pennsylvania CBRN Decontamination Specialist

Job Overview:

PERSON is a member of the National Guard and has been assigned the additional duty of a member of the 35th CBRNE Enhanced Response Force Package (CERFP). The 35th CERFP serves as a rapid response team to Chemical, Biological, Radiological, or Nuclear (CBRN) disasters within FEMA Region III. The Pennsylvania CBRN Decontamination Specialist plays a vital role in ensuring the safety and well-being of individuals and equipment exposed to hazardous CBRN materials during emergency situations. The ideal candidate will demonstrate a solid background in emergency response, hazardous materials management, and a commitment to safety while working in close coordination with law enforcement and other emergency agencies.

Key Responsibilities:

CBRN Decontamination Operations:

Conduct decontamination procedures for individuals, vehicles, and equipment exposed to hazardous CBRN agents during emergencies.

Establish and manage decontamination stations at incident sites, ensuring proper use of personal protective equipment (PPE) and maintaining all safety protocols.

Perform triage assessments to determine contamination levels and prioritize decontamination efforts based on risk and severity.

Incident Response:

Respond swiftly and efficiently to CBRN-related emergencies, working closely with law enforcement, emergency responders, and other local agencies as part of the 35th CERFP.

Ensure accurate documentation of decontamination activities and maintain up-to-date records during CBRN incidents.

Communicate with law enforcement and response teams to coordinate efforts and track the progress of decontamination operations.

Training and Preparedness:

Participate in continuous training exercises to stay up-to-date with CBRN decontamination procedures, safety protocols, and FEMA Region III response standards.

Conduct training sessions for other emergency responders to ensure the effective implementation of decontamination techniques and response actions.

Engage in drills and simulations to assess and improve team readiness for potential CBRN incidents. Safety and Compliance:

Adhere to all relevant federal and state regulations governing hazardous materials and CBRN response efforts.

Follow strict safety guidelines during decontamination operations to minimize the risk of exposure.

Ensure that decontamination equipment is regularly inspected, maintained, and fully operational for use during emergencies.

Coordination and Communication:

Collaborate and coordinate with law enforcement, FEMA, and other emergency response agencies to provide an integrated and efficient CBRN response.

Communicate effectively during incidents to provide updates and synchronize actions across all responding

agencies, including law enforcement.

Assist in post-incident evaluations and contribute to after-action reviews to identify areas for improvement.

Post-Incident Analysis:

Assist in the proper disposal and cleanup of hazardous materials according to established environmental and safety guidelines.

Provide recommendations for improving decontamination procedures based on the evaluation of incident response efforts.

Qualifications:

Required:

High school diploma or equivalent.

Experience in emergency response, hazardous materials management, or related fields.

Completion of specialized CBRN decontamination training or certification (e.g., FEMA, military, or local/state training).

Skills and Abilities:

Strong knowledge of CBRN decontamination processes, equipment, and safety protocols.

Ability to work in hazardous environments, wearing full protective gear and handling dangerous materials.

Excellent communication and teamwork skills to coordinate effectively with law enforcement, emergency responders, and other agencies.

Ability to work under pressure, remain calm in high-stress situations, and take immediate action when required.

Certifications:

Hazardous Materials (HAZMAT) certification.

CBRN-specific decontamination or emergency response training.

CPR and First Aid certification (preferred).

Preferred:

Prior experience in CBRN response, including military, law enforcement, or emergency management settings.

Familiarity with FEMA Region III, local, state, and federal emergency response systems and protocols.

Physical Requirements:

Ability to lift and carry heavy equipment, as well as work in physically demanding conditions.

Must be able to pass physical fitness assessments and be prepared for high-intensity work during emergencies.

25 UNIFORM (radio operator)

US ARMY NATIONAL GUARD MOS 25U (RADIO OPERATOR). (part-time basis/reserves)

fort indiana town gap

Annville, PA

5/2023 - 10/2024

Salary: \$4,000.00 USD Per Year

Hours per week: 48

Duties, Accomplishments and Related Skills:

Job Overview:

The 25U Signal Support Systems Specialist is essential to the U.S. Army's communications and information technology operations. As a 25U, you are responsible for ensuring that the Army's communications equipment, networks, and computer systems function reliably, allowing seamless communication across

military units. You will troubleshoot, repair, and maintain both hardware and software systems, supporting mission-critical communication.

Key Responsibilities:

Install, maintain, and troubleshoot military communication systems, including radios, satellites, and tactical networks.

Provide technical assistance and training on signal equipment to soldiers and commanders.

Perform preventive maintenance checks and services (PMCS) on signal equipment to ensure readiness.

Operate and maintain radio communication systems, including single-channel radios and multichannel transmission systems.

Establish and maintain communications links, including point-to-point and satellite connections.

Troubleshoot and repair hardware and software problems in communication and IT systems.

Configure and manage Army computer networks and ensure security protocols are followed.

Integrate signal support systems and communications networks with vehicles and mobile units.

Prepare equipment for deployment by conducting tests and ensuring all systems meet operational standards.

Maintain accurate records and reports on communications systems, equipment status, and repairs.

Support field exercises and operations by setting up, managing, and dismantling communication networks.

88MIKE (cdl class a driver)

US ARMY NATIONAL GUARD MOS 88 MIKE (CDL CLASS A DRIVER)(partime basis/reserves)

fort indiana town gap

N/A

Annville, PA

4/2018 - 4/2024

Salary: \$4,000.00 USD Per Year

Hours per week: 48

Duties, Accomplishments and Related Skills:

Job Overview:

The 88M Motor Transport Operator is a key role in the U.S. Army's transportation and logistics operations. As an 88M, you are responsible for the operation and maintenance of military vehicles, transporting personnel, cargo, and equipment in various terrains and combat zones. This position ensures the safe, timely, and effective movement of goods and resources, supporting mission success across all military operations.

Key Responsibilities:

Operate and maintain military vehicles such as heavy trucks, tractor-trailers, and other large cargo vehicles.

Transport troops, equipment, and supplies over land and across various terrains.

Ensure proper loading and securing of cargo to prevent damage or accidents during transport.

Perform preventive maintenance checks and services (PMCS) on vehicles to ensure readiness and operational safety.

Manage convoy operations, including route planning, safety protocols, and coordination with other units.

Assist with the recovery of broken-down vehicles and perform minor repairs when necessary.

Communicate effectively with convoy personnel and higher command, relaying information related to movement, status, and logistics.

Follow safety and operational procedures according to Army standards and regulations.

Maintain accurate logs, records, and reports of all vehicle movements, fuel usage, and cargo deliveries. Train and mentor junior soldiers in the proper operation of military vehicles, safety procedures, and maintenance tasks.

DC National Guard Special Police Officer DC NATIONAL GUARD (TASKFORCE DISTRICT). IP 60

N/A N/A

Washington DC, DC

1/2025 - 2/2025

Hours per week: 60

Duties, Accomplishments and Related Skills:

Job Title: DC National Guard Special Police Officer

Job Overview:

The DC National Guard Special Police Officer serves a critical role in supporting law enforcement agencies during high-profile events and emergencies within the District of Columbia. As a deputized officer by the U.S. Marshals Service (USMS), the Special Police Officer works alongside local, state, and federal law enforcement to ensure public safety, law enforcement operations, and emergency response efforts, especially during significant events like the Inauguration. This position is vital in maintaining order, preventing criminal activities, and assisting in the management of large crowds, particularly during events that require a heightened law enforcement presence.

Key Responsibilities:

Law Enforcement Support:

Assist in maintaining order, security, and law enforcement operations during high-profile public events such as the Inauguration and other major gatherings within the District of Columbia.

Patrol assigned areas to deter and detect criminal activity, ensuring the safety and security of the public, law enforcement personnel, and critical infrastructure.

Respond to emergency situations, including crowd control, public disturbances, and other law enforcement needs in coordination with local and federal agencies.

Coordination and Collaboration:

Work closely with local law enforcement, the U.S. Marshals Service (USMS), and other federal agencies to ensure a unified approach to law enforcement and public safety during high-profile events.

Assist in coordinating security efforts, crowd control, and the management of any potential security threats or incidents.

Maintain communication with the law enforcement command to report on the status of operations and to receive updated instructions.

Emergency Response:

Support law enforcement in responding to emergencies such as protests, natural disasters, or incidents requiring immediate action.

Assist with securing incident sites, ensuring the safety of first responders, and providing crowd management in critical situations.

Assist in the safe evacuation of areas if necessary and ensure that emergency procedures are followed. Public Interaction and Customer Service:

Serve as a visible law enforcement presence, providing assistance to the public, answering questions, and offering guidance during major public events.

Address public safety concerns, offering support to civilians as needed while ensuring compliance with law enforcement instructions and regulations.

Reporting and Documentation:

Document all incidents, arrests, and enforcement actions accurately and in a timely manner.

Prepare detailed reports for law enforcement supervisors and the USMS regarding any significant events or actions taken during shifts.

Qualifications:

Required:

Must be a member of the DC National Guard and in good standing.

U.S. Marshals Service (USMS) Special Police Officer deputization.

Completion of law enforcement training and certification, or equivalent military training.

Skills and Abilities:

Strong understanding of law enforcement principles, including crowd control, emergency response, and law enforcement tactics.

Excellent communication and interpersonal skills to work effectively with the public and fellow law enforcement officers.

Ability to remain calm under pressure and act decisively in emergency situations.

Strong teamwork and coordination skills to ensure effective collaboration with other law enforcement agencies.

Certifications:

U.S. Marshals Service (USMS) Special Police Officer certification.

First Aid and CPR certification (preferred).

Preferred:

Prior law enforcement or military experience, particularly in high-stress environments.

Familiarity with the District of Columbia's security protocols and high-profile event management.

Physical Requirements:

Ability to perform physical duties, including walking, standing for long periods, and responding swiftly to emergencies.

Ability to lift and carry heavy objects as needed in various law enforcement tasks.

MILITARY POLICE DESIGNATED BUS DRIVER/ mass casualty driver

US army national guard

fort indiana town gap military base, PA

9/2024 - 1/2025

Salary: \$4,000.00 USD Per Year

Hours per week: 40

Duties, Accomplishments and Related Skills:

I have been assigned to a military police unit, where my responsibilities encompass a variety of critical tasks that support law enforcement and public safety. My primary role involves providing transportation for law enforcement officers to and from training sessions, including those focused on mass casualty event preparedness. In addition to transportation duties, I have provided radio communications support to law enforcement during training missions both stateside and overseas while deployed. These experiences have

deepened my understanding of effective communication and coordination in high-pressure scenarios. Furthermore, I have actively participated in training efforts, including teaching CPR classes to equip others with life-saving skills, conducting search and rescue operations, and supporting missing person missions. My training efforts have also extended to using advanced tools such as the ELPer direction-finding device to locate downed aircraft, demonstrating my technical proficiency and problem-solving abilities in critical situations. These multifaceted responsibilities reflect my commitment to contributing to public safety and enhancing the preparedness of law enforcement personnel through both direct support and hands-on training.

Class B residential driver casella (full time basis)
903 lambson lane
new castle, DE

5/2023 - 1/2024

Salary: \$49,000.00 USD Per Year

Hours per week: 40

Duties, Accomplishments and Related Skills:

Job Overview:

Casella Waste Systems is seeking a reliable and safety-conscious Class B Driver to join our team. As a Class B Driver, you will be responsible for the safe and efficient collection, transport, and disposal of waste and recyclable materials using company-provided vehicles. The ideal candidate will have a commitment to customer service, safety, and environmental responsibility.

Key Responsibilities:

Safely operate company vehicles, including refuse trucks and other equipment, in compliance with local, state, and federal regulations.

Collect and transport waste and recyclable materials along assigned routes.

Load and unload materials, ensuring proper handling and placement at designated facilities.

Communicate with dispatch and route supervisors to ensure timely pickups and deliveries.

Perform daily pre-trip and post-trip inspections of vehicles, reporting any mechanical or safety issues.

Maintain cleanliness and proper functioning of vehicles and equipment.

Provide excellent customer service by addressing customer concerns or issues professionally and efficiently.

Follow company safety policies, procedures, and best practices to minimize accidents and injuries.

Complete and submit required paperwork, including route sheets, tickets, and logs.

Comply with Department of Transportation (DOT) regulations and adhere to Hours of Service (HOS) rules.

typical 40 hour work week.

CDL Class A(full time basis) amazon (stride transportation) 3847 HAZLETTVILLE RD Dover, DE

8/2022 - 11/2022

Salary: \$49,000.00 USD Per Year

Hours per week: 40

Duties, Accomplishments and Related Skills:

Job Overview:

Amazon Freight Partners (AFP) is seeking reliable, safety-focused Class A CDL Drivers to join our transportation team. As a driver with Amazon Freight Partners, you will be responsible for hauling Amazon freight, ensuring on-time deliveries, and maintaining safety standards. This role offers predictable home time, competitive pay, and full-time opportunities with benefits, while operating under local Amazon partner companies.

Key Responsibilities:

Operate Class A commercial vehicles to transport Amazon freight between fulfillment centers, distribution centers, and other designated locations.

Ensure timely and safe deliveries while adhering to company and DOT (Department of Transportation) regulations.

Perform pre-trip and post-trip inspections on equipment to ensure vehicles are in proper working condition. Communicate effectively with dispatchers and supervisors regarding trip progress, delays, or any other concerns.

Safely load and unload freight using appropriate equipment when necessary.

Maintain accurate records, including driver logs (Electronic Logging Device - ELD), fuel receipts, and route sheets.

Follow company safety procedures and traffic regulations to prevent accidents or incidents on the road. Report any mechanical issues, accidents, or route delays immediately.

cdl class b resi driver waste management. (full time basis) 300 harvey drive

Newport, DE

5/2022 - 8/2022

Salary: \$49,000.00 USD Per Year

Hours per week: 40

Duties, Accomplishments and Related Skills:

Key Responsibilities:

Safely operate Class B vehicles, including front-loaders, rear-loaders, and other waste collection trucks, on assigned routes.

Load and unload waste and recyclable materials from residential, commercial, and industrial locations.

Perform daily pre-trip and post-trip inspections to ensure the vehicle is in proper working condition.

Adhere to local, state, and federal transportation regulations and company policies.

Interact with customers in a professional and courteous manner, addressing service-related questions or concerns.

Report any mechanical issues, accidents, or route delays to the supervisor immediately.

Ensure the cleanliness and proper functioning of the vehicle, including proper disposal at designated waste facilities.

Complete required paperwork, including route sheets, work orders, and vehicle logs.

Maintain compliance with Department of Transportation (DOT) regulations and Hours of Service (HOS) requirements.

Assist in training and mentoring new drivers on proper driving techniques and safety procedures.

CDL CLASS B RESI DRIVER (fulltime basis)

Trash tech

755 GOVERNOR LEA ROAD

Manor, DE

5/2021 - 1/2022

Salary: \$49,000.00 USD Per Year

Hours per week: 40

Duties, Accomplishments and Related Skills:

Key Responsibilities:

Safely operate Trash Tech vehicles, including front-loaders, rear-loaders, and roll-off trucks, on assigned waste collection routes.

Collect and transport waste and recyclables from customers in accordance with company policies and local regulations.

Perform daily pre-trip and post-trip inspections of vehicles to ensure they are in proper working condition.

Adhere to all DOT (Department of Transportation) regulations and company safety policies.

Communicate with dispatch and supervisors to resolve issues, report delays, or handle special instructions.

Maintain accurate records, including vehicle logs, route sheets, and work orders.

Handle waste materials in a safe and efficient manner to avoid spills or damage to property.

Ensure the cleanliness and maintenance of vehicles and equipment.

Respond professionally to customer inquiries and service concerns.

Report any accidents, safety violations, or vehicle issues immediately to management.

Qualifications:

Valid Class B Commercial Driver's License (CDL) with a clean driving record.

Minimum [X] years of commercial driving experience (waste management industry preferred).

Ability to pass a pre-employment drug screen, DOT physical, and background check.

Knowledge of local, state, and federal transportation laws and regulations.

Physical ability to lift and carry heavy materials as required by the job.

Excellent communication and customer service skills.

stocker. (part-time basis)

lowes recieving

5005 edgemont ave

brookhaven, PA

4/2018 - 8/2018

Salary: \$15,000.00 USD Per Year

Hours per week: 20

Duties, Accomplishments and Related Skills:

Job Overview:

Lowe's is seeking a hardworking and detail-oriented Stocker to join our team. As a Stocker, you will play a

critical role in ensuring that shelves are fully stocked, organized, and ready for customers. You'll help maintain the overall appearance of the store while assisting customers with finding products. The ideal candidate is a team player with a strong work ethic who takes pride in maintaining a clean, well-stocked store.

Key Responsibilities:

Unload merchandise from trucks and accurately stock items on shelves in a timely manner.

Organize and maintain product displays to ensure items are easy for customers to locate.

Monitor product availability and replenish shelves as necessary to ensure no out-of-stock items.

Assist in setting up promotional displays and signage.

Maintain cleanliness and organization of aisles and work areas.

Provide assistance to customers by helping them locate products or answering questions about inventory.

Follow safety guidelines when handling heavy items or operating equipment such as forklifts or pallet jacks.

Assist with inventory counts and report any discrepancies or damaged products.

Ensure accurate labeling of prices and product information on shelves.

Qualifications:

High school diploma or equivalent (preferred).

Ability to lift heavy items (up to 50 lbs) and stand for extended periods.

Strong attention to detail and organizational skills.

Good communication and customer service skills.

Basic math skills for inventory management and price labeling.

Education:

glasgow high school newark, DE United States High school diploma or equivalent 6 / 2017

Major: n/a Minor: n/a

West Chester University West Chester, PA United States

Bachelor's degree 8 / 2024 **GPA:** 2.95 of a maximum 2.95 **Credits Earned:** 157 Semester Hours

Major: Business Management. BS(Bachelor of Science)

Job-related training:

I have been assigned to a military police unit, where my responsibilities encompass a variety of critical tasks that support law enforcement and public safety. My primary role involves providing transportation for law enforcement officers to and from training sessions, including those focused on mass casualty event preparedness. In addition to transportation duties, I have provided radio communications support to law enforcement during training missions both stateside and overseas while deployed. These experiences have deepened my understanding of effective communication and coordination in high-pressure scenarios. Furthermore, I have actively participated in training efforts, including teaching CPR classes to equip others with life-saving skills, conducting search and rescue operations, and supporting missing person missions. My training efforts have also extended to using advanced tools such as the ELPer direction-finding device to locate downed aircraft, demonstrating my technical proficiency and problem-solving abilities in critical situations. These multifaceted responsibilities reflect my commitment to contributing to public safety and enhancing the preparedness of law enforcement personnel through both direct support and hands-on training.

As you may be aware, your employee/student is a member of the National Guard and has been assigned the additional duty of a member of the 35th CBRNE Enhanced Response Force Package (CERFP). The 35th CERFP serves as a rapid response team to Chemical, Biological, Radiological, or Nuclear (CBRN) disasters within FEMA Region III. The Pennsylvania CBRN Decontamination Specialist plays a vital role in ensuring the safety and well-being of individuals and equipment exposed to hazardous CBRN materials during emergency situations. The ideal candidate will demonstrate a solid background in emergency response, hazardous materials management, and a commitment to safety while working in close coordination with law enforcement and other emergency agencies.

Languages:

English

Spoken Advanced

Written Intermediate

Read Intermediate

Organizations and affiliations:

civil air patrol - cadet

Professional publications:

Professional Licenses and Certifications:

Commercial Driver's License (CDL) - Class A with Endorsements

I hold a Class A Commercial Driver's License (CDL), which qualifies me to operate a wide range of heavy commercial vehicles, including tractor-trailers and trucks with trailers. My CDL is further enhanced by multiple endorsements:

Hazardous Materials (Hazmat) Endorsement: This allows me to transport hazardous materials in compliance with federal safety standards.

Passenger (P) Endorsement: This qualifies me to operate vehicles carrying passengers, such as buses, in both commercial and non-commercial settings.

Tanker (N) Endorsement: This enables me to operate vehicles designed to carry liquid or gaseous materials in bulk.

Transportation Worker Identification Credential (TWIC) Card: I have been cleared to access secure and restricted maritime areas, an essential certification for transporting goods to and from ports.

With these qualifications, I have successfully operated various vehicles in multiple roles, including as a Motor Transport Operator for the U.S. Army, and in commercial driving positions with companies like Amazon and Waste Management. My experience across different industries has helped me develop strong safety practices and the ability to manage different types of cargo and vehicle configurations.

Amateur Radio License (FCC Licensed Operator)

In addition to my CDL, I also hold an Amateur Radio License from the Federal Communications Commission (FCC). This license enables me to operate amateur (ham) radio stations and engage in non-commercial communication across various radio frequencies. As an FCC-licensed radio operator, I: Have a deep understanding of radio equipment operation and maintenance.

Follow FCC regulations for communication, including rules related to radio signal transmission and emergency communication.

Am qualified to provide emergency communication support during natural disasters, blackouts, or other

emergencies where conventional communication systems may fail.

My background in both trucking and radio operation gives me a unique skill set, allowing me to assist in communication logistics and operations in emergency situations. It also provides additional technical expertise in communication systems, complementing my experience in transportation and logistics.

David Carangan

1456 Balmoral Rd Coatesville, Pennsylvania 19320 (610) 314-8177 davidcarangan@gmail.com

SUMMARY

Motivated and detail-oriented Computer Science major with hands-on experience in technical support and a solid foundation in programming languages. Currently contributing as an IT Help Desk Consultant at West Chester University, adept at resolving complex issues and providing technical assistance to diverse stakeholders. Proven ability to excel in dynamic environments. Eager to apply my skills and expand my knowledge through a challenging internship opportunity in the field of computer science.

WORK EXPERIENCE

West Chester University, PA — Technician support

May 2024 - PRESENT

Manage deployment of softwares and hardwares to various departments Managed replacement and recycling of old and outdated devices

West Chester University, PA — IT Help Desk Consultant

IAN 2023 - PRESENT

Provides technical assistance to a multitude of people, from students to staff and faculty members

Conducts research to resolve complicated issues

BJs Club, Downingtown — Warehouse Fulfillment Specialist

JAN 2021 - AUG 2021

Performed general warehouse activities including gathering merchandise from a pick list and updating merchandise locations

Mentored new team members

Paoli Hospital, Paoli — Volunteer

APR 2018 - AUG 2018

Transported patients to varying sections of the hospital Delivered important materials and documents to different members of the staff Coordinated within a team to handle large workloads

EDUCATION

West Chester University, Pennsylvania

AUG 2022 - December 2025

Bachelor of Science in Computer Science

University of Pittsburgh, Pennsylvania

AUG 2019 - 2020

Completed coursework in Swanson School of Engineering

SKILLS/TRAININGS

JAVA, ServiceNow, Github
Intro to Python
Delaware Community College 2021

AWARDS

First Place, BSHS STEM Team – Pennsylvania Governor's STEM Competition 2019

Recipient of Neumann Scholarship (Connelly Foundation) 2015-2019

EXTRA CURRICULAR ACTIVITIES

Robotics, President 2018-19

Service Learning in Public Policy Program (SLiPP) *Participant, Freedom Valley Foundation*, 2016, 2017

Jordan Finch

167 Walker Road Landenberg, PA 19350 (302) 985-3629

jordanfinch999@gmail.com

Motivated and dedicated computer science student seeking an entry-level position to apply academic knowledge, gain real-world experience and contribute to innovative technology solutions.

EDUCATION

West Chester University

Bachelor of Science in Computer Science Expected Graduation: December 2025

Relevant Coursework:

- Computer Science I, II, & III: Topics studied: Java program design, program flow, command line and file input/output, variables and types, string and sequence processing, classes and objects, arrays, recursion, aggregate objects, GUIs, object-oriented programming
- Foundations of Computer Science: Topics studied: regular and context free grammars and languages, computational logic, finite state machines, and parsing
- *Computer Systems:* Topics studied: CPUs, memory, storage, networking, operating systems, and parallel and distributed programming
- Data Structures & Algorithms: Topics studied: data abstraction, recursion, lists, stacks, queues, linked lists, trees, hashing, searching and sorting algorithms, and evaluation of algorithm efficiency
- Computer Security and Ethics: Topics studied: creating a secure system, attack methods and defenses
- Software Engineering: Topics studied: text processing, inheritance, polymorphism, abstract classes, interfaces, generic classes, exception classes, exception throwing, and handling
- *User Interfaces:* Topics studied: applications using Java-based components with JavaScript and webbased components with HTML

WORK EXPERIENCE

Technology Support Intern

Artesian Water Company – Newark, DE

Full-Time: Summer 2025 | Part-Time: August 2025 – Present

- Supported enterprise-wide technology initiatives, including Microsoft Teams rollout and email migration to Exchange
- Assisted in the decommissioning of legacy phone systems and transition to modern communication platforms
- Delivered daily IT support, troubleshooting hardware/software issues for internal users
- Documented processes and helped streamline support procedures for long-term efficiency

Cashier (Part-Time)

Food Lion – Newark, DE

June 2022 - June 2024

- Provided customer service in a fast-paced retail environment
- Handled transactions accurately and efficiently

• Supported team operations through restocking and maintaining clean, organized work areas

Volunteer

LaMancha Animal Rescue – Coatesville, PA

May 2017 – August 2021

- Cared for animals during weekly volunteer shifts, maintaining cleanliness and health standards
- Collaborated with staff and volunteers to ensure proper feeding and enrichment for animals
- Developed a strong sense of responsibility, time management, and compassion

SKILLS

Teamwork: Experience collaborating with diverse teams in both academic and workplace settings **Adaptability:** Fast learner; able to adjust quickly to new tools, technologies, and environments **Problem-Solving:** Able to analyze issues logically and troubleshoot technical problems **Communication:** Strong written and verbal communication skills gained through customer-facing roles and interacting with end-users in IT

Jack Goehringer

jackgoehringer@gmail.com | 484-213-5142 | github.com/jackgoehringer

EDUCATION

West Chester University

West Chester, PA

B.S in Computer Science

Expected Dec. 2025

EXPERIENCE

Asylon Robotics

Norristown, PA

RSOC Analyst

April 20205 - Present

- Remotely operated ground based quadruped drones to conduct security patrols at customer sites.
- Coordinated with clients' security teams to report and respond to on site security events.
- Maintained accurate logs of conducted patrols and assisted in system troubleshooting.

Interdigital

Conshohocken, PA

Database Modernization Intern

July 2022 - August 2022

- Executed database migration from an on-premises Microsoft SQL Server database to an Azure Data Lake. The purpose of the migration was to reduce overhead costs and increase database availability and security.
- After the migration, verified database's functionality and compatibility within the Azure ecosystem.
- Wrote python scripts and macros to automate various tasks for this migration process and for future migrations

Data Pipeline Optimization Intern

January 2023 - April 2023

- Improved daily processes in Azure Data Pipelines by restructuring ETL workflows for parallel processing.
- Created itemized table dependency graphs of the various data sources to ensure proper ordering of the new pipeline's workflows.
- Restructuring and parallelization ensured international teams received accurate and up to date reports before starting their workday.

Projects

GroupMe Bot Driver | Groupme, Git, Amazon S3, Heroku, Python HTML, CSS

- This driver for GroupMe monitors multiple group chats and sets custom rules and commands for each. The bot reads each message sent and can perform role-based actions from different users.
- Chats can be linked to an AmazonS3 SQL database to save information from user messages and run queries using Amazon Athena.
- Use case was to create an automated plan for transporting more than 50 people to and from events with few drivers. Members of the chat used commands to RSVP and become drivers for the event. Passengers selected their pickup location, drivers communicated how many passengers they could take, and the script updated a website with a schedule for passengers and drivers to follow.

SumoBot | Arduino, Prefabricated Kit, C++ Libraries, Game Theory

- Developed strategic operating modes for an Arduino-based SumoBot, enabling dynamic responses to opponent behaviors during competitive robot matches in circular arenas
- Applied game theory principles to optimize decision matrices for mode selection, analyzing payoff structures of different tactical approaches to maximize win probability against various opponent strategies
- Created a system that allows the robot to balance on its end and is tolerant to small external forces. Used a fast inner loop for angle fixing and a slow outer loop to maintain relative position and yaw direction.

TECHNICAL SKILLS

Languages: Python, C/C++, SQL, Java, HTML/CSS, LaTeX

Developer Tools: Cursor, Git, Google Cloud Platform, Azure, Amazon S3 and Athena

Libraries: Transformers, Gradio, Openai, PyTorch, Pandas, NumPy

Miscellaneous: Solidworks, Lucidchart, Trello, Arduino

Jeffrey Kjelstrom

Kennett Square, PA | <u>jeffreykjelstrom@gmail.com</u> | jeffreykjelstrom.com

EDUCATION

West Chester University of Pennsylvania, West Chester, PA

Bachelor of Science in Computer Science, May 2026

• GPA: 3.645

Relevant Coursework: Computer Science I-III, Data structures and Algorithms, Software Engineering, Computer Security and Ethics, Artificial Intelligence

RELEVANT EXPERIENCE

Cencora (Fortune 10 Company), Conshohocken, PA

Technical Admin Intern, June/2025 – August/2025

- Worked on an internal-facing IT team that focused on managing a real time data replication system.
- Lead a project that helped increase performance in the replication servers.
- Managed an active SAP system in multiple environments

Tavant Technologies, Santa Clara, CA

Software Development Intern, June/2024 - August/2024

- Created an employee management system using Django, SQL, and vanilla JS
- Learned how to use different libraries in Python such as Pandas, NumPy, Matplotlib
- Learned about the different types of Software Development Life Cycle used in today's industry

ADDITIONAL EXPERIENCE

Onix Group, Kennett Square, PA

Front Desk Agent, July/2023 – current

- Greet and assist guests with check-ins, check-outs, and reservation inquiries, ensuring a welcoming and efficient experience
- Manage reservations, cancellations, and special requests using OnQ
- Provided detailed information about hotel amenities, local attractions, and dining options to enhance the guest experience

SKILLS

- Languages: Java, C++, C#, Vanilla JS, HTML/CSS, Python
- Web Frameworks: Node.js, Django
- Operating Systems: Linux, Windows
- IDEs: Visual Studio, Visual Studio Code
- Other systems: AWS, GitHub, Squarespace Domains
- Office: Microsoft Office Suite

PROJECTS

LeepFrog

A ERP style web application that enables new entrepreneurs to manage a small business with employees and clients

- Developed using Frappe and ERPNext along with vanilla HTML, CSS, and JavaScript
- Includes a full Frappe interface for business owners and a simple customer portal for clients
- Created with a team of other computer science students for our capstone project at West Chester University
- Collaborated with our client, Connor Gabe, who is the founder of LeepFrog

Driverless, https://github.com/kjelstromjr/Driverless

A web interface for the game Beam.ng and the mod BeamMP which allows for easy management of the server

- Parses a map from the game world data to generate a live map of the currently selected world
- Parsing is handled by a separate program created in C++ and compiled for Windows and Linux
- Built entirely from scratch with HTML/CSS, Vanilla JS, Node.js, C++, and Lua

Personal Website, https://jeffreykjelstrom.com

My personal website showing my skills, experience, and education

- Built from HTML/CSS and Vanilla JS, and uses Node.js on the backend
- Run from an AWS Linux server