

## TECHNICAL SKILLS

**Programming Languages** | Python3, JavaScript ES6+, SQL, HTML5, CSS

**System Design** | Monoliths, Microservices, Domain-driven design, Message passing, Event sourcing

**Back-End** | FastAPI, Django 4, PostgreSQL, MongoDB, JWT, CI/CD

**Front-End** | React, Redux, Tailwind CSS, Bootstrap, Websockets

## RELEVANT PROJECTS

### WebChat | <https://github.com/funksy/WebChat>

Apr '24

*An online chat application featuring websockets, FastAPI, React, and MongoDB*

- Engineered a real-time chat application in 6 weeks as part of a 4 person team, using **WebSocket's** to connect clients to a **FastAPI** backend.
- Designed all of the application's data models, composed database schemas, and persisted data to a selfhosted **MongoDB** server
- Created **Tailwind CSS** styled UI to permit users to create accounts and chat in real-time using **React** backed with **Redux**. Created reducers for managing the list of messages, managing the list of active users, and managing the status of user (logged in or not)
- Integrated a **JWT** based authentication protocol to manage users and validate authentication status.

### CarCar | <https://github.com/funksy/CarCar>

Feb '24

*An application for managing car dealership operations, featuring Django, React, and PostgreSQL*

- Developed an application with one collaborator using **Docker** to implement a microservice architecture featuring 7 distinct services.
- I created 2 of the 3 featured API's using **Django**. My API's present 15 endpoints and use custom encoders to serialize and deserialize data
- Created a **Bootstrap** styled UI using **React** to allow an employee to perform manage vehicle inventory, vehicle sales, and vehicle service operations.
- Implemented **PostgreSQL** database. I developed the the schemas and relationships for 7 models

### Maze Generator and Solver | <https://github.com/funksy/Mazes>

Jan '24

*An application for generating and solving mazes*

- Built a program using **Python** for generating and solving mazes, implementing Prim's algorithm, breadth first search, and depth first search
- Implemented a **Pygame** based visualization to illustrate the the creation and solving of a maze and to demonstrate the differences in the algorithms

## RECENT PROFESSIONAL EXPERIENCE

### United States Air Force | MSgt, Special Missions Flight Chief

Jul '21 - Nov '23

- Identified employee credentialing procedure oversight and resolved in 72 hours by recredentialing 138 personnel, preventing a service lapse on a \$96M contract
- Resolved a service outage affecting communications across the entire USCENTCOM theater. Led the response team of 25 to resolve the outage within 1 hour, restoring service to 32 military installations and protecting a facility valued at \$247M

### Defense Intelligence Agency | MSgt, Operations Coordinator

Jun '18 - Jul '21

- Facilitated the US President and Secretary of Defense visit to London by managing logistical coordination, diplomatic clearance requirements, & collaboration with 4 additional agencies within US Embassy London, resulting in a successful visit and the promotion of US foreign policy objectives
- Oversaw the Diplomatic Clearance program, processing travel requests for 2,700 aircraft and 5,800 personnel with the Hungarian government to enable travel to and through the territory of Hungary

## EDUCATION

### Hack Reactor | Advanced Software Engineering Immersive Program

Nov '23 - Apr '24

- 19 week coding program, featuring **Python**, **JavaScript** and **SQL** training in an **Agile** environment. Project-based curriculum that included solo coding, pair programming, and team collaboration. Exposed to popular libraries such as **Django**, **FastAPI**, **React**, **PostgreSQL**, and **MongoDB**.

### Community College of the Air Force | AS, Information Systems Technology

Feb '13

### Community College of the Air Force | AS, Information Management

Jan '16