

# Franklin Shack

[franklinshack@gmail.com](mailto:franklinshack@gmail.com) | Warminster, PA | (215) 694-4200 | [linkedin.com/in/fshack/](https://www.linkedin.com/in/fshack/)

## EDUCATION

---

Stevens Institute of Technology | Hoboken, NJ

Bachelor of Science in Computer Science

Graduated May 2023

**GPA:** 3.56 | **Awards:** Dean's List | **Coursework:** Concurrent Programming, Data Structures, Algorithms, Agile Methods, Machine Learning, Databases, Cloud Computing, Cloud Security

## SKILLS & PROGRAMMING LANGUAGES

---

Python, Java, C#, Bash, Rust, Unity, OCaml, JavaScript, HTML, CSS, ReactJS, Django, PostgreSQL, MongoDB

## WORK EXPERIENCE

---

Stevens Institute of Technology | Hoboken, NJ

Course Assistant - Discrete Structures, Automata & Computing,

August 2020 - May 2023

Fundamentals of Computing, Introduction to Game Design

- Wrote an autograding solution for programming assignments and labs in Python & Racket, increasing efficiency by 60x
- Developed new homeworks, labs, and programming assignments in Python & Racket
- Held weekly office hours to assist students with coursework through active discussion and problem solving
- Led weekly lab sessions for students to learn relevant material in Python, Racket and C#

Research Assistant

May 2020 - December 2020

- Researched access control policies and the best languages to implement them on a large scale
- Created a template using HTML, CSS, and JavaScript for a social media platform that would allow users to strictly define rules for who can see and comment on their posts
- Implemented an access control system using Prolog, then integrated it into a Java servlet
- NSF Award #1718713

## PROJECTS

---

Stevens Institute of Technology | Hoboken, NJ

Soundle

January 2022 - May 2022

- Collaborated with five other students to design and prototype a Wordle-like game using a ReactJS frontend and Python backend
- Utilized ReactJS to implement key features, such as a leaderboard and daily randomized games, as well as a user-friendly interface
- Used the test-driven development process to conduct thorough testing of each feature and resolve software defects, ensuring a high quality product

Forex Trading Platform

September 2022 - May 2023

- Collaborated with five other students and an outside client to develop algorithms to trade currency pairs
- Adapted existing algorithms from MQL5 to Rust, resulting in an over 100x decrease in training time
- Designed new algorithms and training methods to further increase the performance of the model by 300%

## ACTIVITIES

---

Stevens Game Development Club - *President*

May 2021 - December 2022

Stevens Cyber Defense Team - *Vice President*

May 2020 - May 2023