Sean Kelly

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EDUCATION

Northeastern University — Boston, MA
Khoury College of Computer Sciences — Sep 2019 – Present
Candidate for Bachelor of Science in Computer Science, Minor in Information Ethics — Expected May 2023
- GPA and Honors: 4.00/4.00 and Dean's List
- Relevant Courses: Object-Oriented Design, Algorithms, Computer Systems, Networks and Distributed Systems, Foundations of Cybersecurity, Discrete Structures, Law and Ethics of Digital Tech

TECHNICAL SKILLS

Languages: Java, C++, TypeScript, Python, C#, JavaScript, C, HTML, CSS, SQL
Frameworks: Express, Node.js, Bootstrap, Jest, Google Test, Django, JUnit
Technologies: Git, MongoDB, OpenGL, Postman, VirtualBox, LaTeX

EXPERIENCE

Social Media Startup — Remote
Backend Engineer — Jun 2021 – Present
- Designed a fully-fledged backend with support for personalized home feeds, trending posts, an explore feed, and more using **Node.js**, **Express**, **MongoDB**, **TypeScript**, and **JavaScript**.
- Collaborated with pre-seed investors, UI/UX designer, and frontend developers to build the infrastructure necessary to expand the platform into a social media site and e-commerce platform hybrid.

Ansys — Remote
Software Engineering Co-op – Graphics and Post-Processing — Jan 2021 – Aug 2021
- Created a framework in **C++** to assess the speed and accuracy of a new **OpenGL** shader-based scene graph rendering engine used throughout the company's most popular product, Ansys Mechanical.
- Led development on a project to embed 3D simulation results in exportable reports, which was ultimately described as the "best new feature in several months" by the Mechanical VP of Product.
- Developed client-facing automation APIs using **C#**, **Python**, and **JavaScript**.

Angel's Scholar Award Program — Boston, MA
Object-Oriented Design Tutor — Oct 2020 – Dec 2020

Northeastern University — Boston, MA
Discrete Structures Teaching Assistant — Sep 2020 – Dec 2020
- Led 3 lab periods per week, each with 35 students, to review lecture concepts such as searching and sorting.

Accenture — Remote
Technology Research Analyst — Jun 2020 – Aug 2020
- Produced original research on data interoperability and digital twins for the annual Technology Vision report.
- Investigated e-commerce live streaming in Western markets as a tool for connecting with Gen Z shoppers.

PROJECTS

Personal Website — May 2021
- Designed personal portfolio website using **HTML**, **CSS**, **JavaScript**, and **Bootstrap**.
- See more at: se-ke.github.io.

AI Minesweepers — Feb 2019 – Dec 2019
- Created an agent-based simulation in **Java** that combines a custom-built feedforward neural network with a genetic algorithm to train agents to efficiently pick up randomly generated mines while avoiding asteroids.
- See more at: github.com/se-ke/Minesweepers.

Spotted — Sep 2018
- Developed a mobile app on **Android** that locates stranded flood victims through drone-based computer vision.
- Earned third place at PennApps, the world's largest college hackathon with 200+ teams and 700+ contestants.
- See more at: devpost.com/software/tidesafe.

INTERESTS

- Hiking, Traveling, Piano, French, Reading, Running