

Dennis Kats

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Availability: January 2020 – June 2020

Education

Northeastern University, Boston, MA

(September 2018 – Present)

Khoury College of Computer Sciences, Honors Program

Candidate for a Bachelor of Science degree in Computer Science and Mathematics

(Expected May 2022)

Relevant Coursework Fundamentals of Computer Science 1 & 2, Discrete Structures, Logic and Computation, Object-Oriented Design, Computer Systems, Web Development, Algorithms and Data Structures, Calculus III, Linear Algebra, Differential Equations, Probability and Statistics

Honors GPA: 3.88/4.0, Dean's List

Computer Skills

Programming (Proficient): Java, Swing, C#, Racket, Python

Languages (Familiar): HTML, CSS, JavaScript, jQuery, ReactJS, Redux, SQLite, ACL2, Bash, C, x86 Assembly

Operating Systems Microsoft Windows, macOS, iOS, Ubuntu

Software Eclipse, IntelliJ IDEA, Visual Studio, Visual Studio Code, Vim, Git, Adobe Photoshop, Adobe InDesign, Adobe Premiere Pro, Adobe Dreamweaver, LaTeX

Work Experience

Course Assistant for Fundamentals of Computer Science I, Northeastern University, Boston, MA (September 2019 – Present)

- Graded homework assignments, reading up to 5000 lines of code per week, and provided feedback to students.
- Held office hours and lab sessions to assist students with debugging code and reviewing core concepts.
- Attended weekly staff meetings and collaborated with the teaching team to improve the course curriculum.

Teaching Assistant, The Scholars' Academy High School, Rockaway Park, NY

(October 2017 - May 2018)

- Developed thorough lesson plans and projects, and graded assignments for Advanced Placement (AP) Physics and AP Computer Science A classes.
- Created answer keys to over 10 quizzes and over 40 problem sets.
- Organized and managed class files and student work.

Private Tutor, Rockaway Park, NY

(September 2016 – May 2018)

- Tutored and worked with students from ages 9-17, including those with special needs and learning difficulties.
- Offered help in a variety of STEM subjects such as AP Calculus, AP Chemistry, SAT math, and more.

Volunteer, Intech 21 Inc., Port Washington, NY

(Summer 2012 - 2014)

- Assembled and calibrated over 100 electrical power meters, and managed company data and inventory.
- Observed real-world applications of electrical engineering and computer science in industry.

Personal Projects

Vortecs Desktop and Mobile

(January 2019 – May 2019)

- Using Java Swing for desktop and Swift for iOS, co-designed and pair programmed a learning tool for first-time linear algebra students to help visualize linear transformations.
- Implemented multiple visualization features such as playback and camera controls, an animation speed slider, an infinite grid, and more.
- Tested thoroughly with over 300 unit tests using custom-developed testing library.

Mario Watch-face for Fitbit

(July 2019 – August 2019)

- Developed a watch-face using JavaScript, CSS, SVG, and the Fitbit SDK to show an animated appreciation for Nintendo's mascot, Mario.
- Implemented a "Have your phone?" reminder using events to detect interruptions in the watch-phone Bluetooth connection, which can be toggled or delayed in the watch-face settings.
- Also implemented a day/night cycle using real-time geographic coordinates of the phone's location and an open-source library to calculate the times for sunset and sunrise.

Find My Bus for Fitbit

(July 2019)

- Developed an app for Fitbit which uses MTA's Real-Time Data API to retrieve status updates on buses on route, and displays relevant info such as the approximated time until the bus arrives at a particular stop or how many stops away it is. The app is compatible with all MTA bus routes through Brooklyn, Queens, and Manhattan.