Daniel Susman

Available: January – September 2021
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EDUCATION

Northeastern University, Boston, MA — Sep. 2019 – Present
Khoury College of Computer Sciences
Candidate for a Bachelor of Science degree in Computer Science — Expected Graduation: June 2023
Related Courses: Algorithms and Data | Computer Systems | Object Oriented Design
Logic and Computation | Fundamentals of Computer Science I and II
Mathematics of Data Models | Discrete Structures
Honors: GPA: 3.8/4.0 | Dean's List | Dean's Scholarship

Roy C. Ketcham Senior High School, Wappingers Falls, NY — Sep. 2015 – June 2019
Honors: GPA: 103/100 | National Honor Society 2017 – 2019
Third in the Class of 2019
Vice President of Math Team 2016 – 2019
Member of Conference All-State Symphonic Orchestra 2017 - 2018
Member of All-Eastern Symphonic Orchestra 2019

TECHNICAL KNOWLEDGE

Languages: Java | Python | Bash | Lisp | LaTeX | C
Systems: macOS | Linux | Windows
Applications: Git | Microsoft Excel | Adobe Creative Suite

PROJECTS

Sorting Algorithms Visualizer — Sep. 2020 – Present
- Design a Python application to illustrate the steps taken by various sorting algorithms when operating on arrays of random size, using Pygame library
- Create intuitive environment including running time to enable asymptotic comparisons between algorithms

ExCELlence Animation Editor — May 2020 – June 2020
- Developed a GUI application, utilizing Java Swing, to display animation sequences and allow users to edit objects shown on screen
- Optimized runtime and space complexity to enable smooth video scrubbing and information querying
- Demonstrated an understanding of the MVC pattern and its benefits for extension, readability, and reduced coupling of system components

EXPERIENCE

Lopez Lab Undergraduate Researcher, Boston, MA — Sep. 2020 – Present
- Explore quantum mechanics and nonadiabatic molecular dynamics to predict photochemical reaction outcomes
- Train and test neural networks in Python to speed up expensive quantum chemical calculations, and report jobs with SLURM
- Collaborate with a team of three curious post-doctorate chemists, two graduate students, and six undergraduate students to analyze data and provide computer science knowledge, while managing individual tasks and deadlines

National Parks Service Volunteer, Poughkeepsie, NY — Nov. 2016 – Dec. 2018
- Assisted teams of experienced National Park Rangers with delivery of entertaining, historic lessons about Eleanor Roosevelt and family to hundreds of people
- Established lasting connections with a dozen colleagues; practiced performing under pressure and communicating with strangers
- Exemplified strong work ethic and self-discipline when training for ten hours per week

INTERESTS

Hiking | Biking | Solar Energy | Music (Cello/Piano/Music Theory/Sound Design) | World Travel | Fitness | Cooking