

Daniel Melcer

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Availability: January 2019 - June 2019

Education

Northeastern University

Boston, MA

College of Computer and Information Science • GPA: 4.00/4.00

September 2017 - Present

Candidate for a Bachelor of Science in Computer Science

May 2021

Meets requirements for admission to 5-year Master of Science program

May 2022

Minors Math, Physics

Coursework Graduate Algorithms, Computer Systems

Undergraduate Building Extensible Systems, Object Oriented Design, Linear Algebra, Group Theory

Awards Honors Program, Dean's List

Activities Deputy Head of Communication of Times New Roman Satire Magazine, Webmaster of NUHacks, Member of Paradigm Hyperloop

Skills

Languages Java, C#/VB.NET, Typescript, Javascript, Python, Racket, Solidity, C/C++

Frameworks Keras, RESTEasy, React, Sequelize, CUDA, Truffle, Django

Tools Git, Oracle, Postgres, AWS

Technical Autodesk Inventor, Basic Electronics, 3D Printing

Experience

College of Computer and Information Science • Northeastern University

Boston, MA

Fundamentals of Computer Science 1 Tutor/Grader

January 2018 - Present

- Provided guidance to students during lab sections on topics such as program design and testing
- Held scheduled office hours to assist students with difficult concepts taught during lecture

Forward Thinking Systems

Jericho, NY

Summer Intern

May 2018 - August 2018

- Detected specific features present in image thumbnails with Python and Keras
- Devised a Typescript Alexa application to answer common customer queries about their fleet
- Collaborated with Poland office on C# application to view and export archived video from an external disk
- Migrated a password-based Java SOAP application to REST and implemented an OAuth2 token flow
- Created a real-time dashboard in VB.NET to report statistics on current support queues and SLA percentages

Brookhaven National Laboratory

Upton, NY

Summer Research Intern

July 2016 - August 2017

- Worked with IT to construct a Django website to conveniently access a database of on-site network switches
- Wrote a Python desktop application to manage, sort, and search a database of over 1000 ethernet ports
- Increased speed of search for new continued fraction representations of known constants over 100x with CUDA

Projects

Invertible Programming Language • Northeastern University

Boston, MA

Language Extension • Project for Building Extensible Systems

January 2018 - April 2018

- Extended Racket programming language and standard library to allow for definition of invertible functions
- Utilized algebraic rules to automatically generate inverses of functions composed of other invertible functions

Smart Contract Applications • Personal Project

December 2018 - January 2018

Connect Four via Smart Contract • connect.danielmelcer.net

- Learned how to develop applications to run on Blockchain-based platforms
- Programmed a Solidity smart contract allowing people to initiate, join, and play Connect Four games
- Built a corresponding website to interface with the contract if a Web3 browser or extension is installed