

Daniel Melcer

21 Nicola Lane, Nesconset, NY 11767

☎ (631) 682-0560 | ✉ daniel@danielmelcer.net | 📱 dmelcer9 | 🌐 dmelcer9

Education

Northeastern University

Boston, MA

B.S. IN COMPUTER SCIENCE • MINORS: MATH & PHYSICS • GPA: **4.00**

May 2021

- Candidate for PlusOne MS program.
- **Relevant Coursework:** Fundamentals of Computer Science, Discrete Structures, Linear Algebra, Building Extensible Systems, Algorithms.

AWARDS

Fall 2017 **Dean's List**, College of Computer and Information Science

ACTIVITIES

2017 - Present **Member**, Paradigm Hyperloop
2017 - Present **Member**, Times New Roman Satire Magazine

Smithtown High School East

Saint James, NY

GRADUATED WITH HONORS • GPA: **4.64**

June 2017

AWARDS

2017 **Research Report Badge**, Society for Science and the Public
2017 **National AP Scholar**, The College Board
2017 **Physics Award**, Smithtown High School East

ACTIVITIES

2013-2017 **Lead Programmer & Vice President of Engineering**, Smithtown Robotics
2014-2017 **Technical Director**, Math Honor Society

Skills

Programming Java, Solidity, C++/CUDA, Python, Racket, React JS
Technical Git, 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

- Provide guidance to students during lab sections on topics such as program design and testing.
- Hold scheduled office hours to assist students with concepts taught during lecture.

Brookhaven National Laboratory

Upton, NY

SUMMER INTERN

July-August 2016, 2017

- Developed 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 ethernet ports in multiple buildings.
- Used CUDA to search for continued fraction representations of known roots of the Riemann Zeta function.

Adademic and Technical Projects

Invertible Programming Language • Northeastern University

Boston, MA

RACKET PROGRAMMING LANGUAGE EXTENSION • PROJECT FOR BUILDING EXTENSIBLE SYSTEMS

Spring 2018

- Created a programming language extension to define invertible functions.
- Used algebraic inverse rules to allow for the automatic creation of inverses for functions that are composed of other invertible functions.

Smart Contract Applications • Personal Project

Winter 2017-2018

CONNECT FOUR IMPLEMENTED VIA SMART CONTRACT • CONNECT.DANIELMELCER.NET

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