

EDUCATION

Northeastern University Boston, MA

May 2022 | GPA: 3.85/4.0

Candidate for Bachelor of Science

Mathematics

Minors:

Data Science

Electrical Engineering

Mechanical Engineering

Salem High School Salem, NH

June 2017

High School Diploma

COURSEWORK

Previously Taken:

Dynamical Systems

Analysis 1

Applied Mathematics Capstone

Database Design

Large Scale Storage & Retrieval

Statics

Dynamics

Thermodynamics

Electronics

Currently Taking:

System Analysis and Control

Fundamentals of Linear Systems

Partial Differential Equations

SKILLS

Proficient in:

VBA • R • SQL

Microsoft Office (Excel - VLOOKUP, Pivot
Tables, Power Pivot)

Working Knowledge of:

Mathematica • SAS • Matlab • MongoDB

Racket • Python • Java • \LaTeX

INTERESTS

Reading science fiction • Hiking

Playing saxophone • Chess

LINKS

nicholaspayne.net

github.com/nipayne

linkedin.com/in/ni-payne

WORK EXPERIENCE

HOMESITE INSURANCE

Actuarial Analyst Co-op

July 2019 - December 2019 | Boston, MA

- Automated and developed various templates to increase efficiency, including a web dashboard that allowed for users to effectively summarize and visualize loss performance metrics.
- Proposed, developed, and presented to upper level management four different rate level adjustments for various insurance products based on analysis of historical state performance.
- Prepared and presented analytical summaries to several managers, which focused on highlighting the performance and discussing potential strategies of various states.

NORTHEASTERN UNIVERSITY

Undergraduate Teaching Fellow

August 2020 - Present | Boston, MA

- Work closely with a 30 student introduction to proofs course designed primarily for freshman math and computer science majors.
- Plan and facilitate weekly recitation sessions designed to reinforce key course concepts and to support students with assignments and assessments.
- Assist with managing online aspects of the course, including the course site, discussions boards, and virtual learning platforms.

Undergraduate Mathematics Grader

August 2020 - Present | Boston, MA

Undergraduate Mathematics Tutor

July 2018 - Present | Boston, MA

SALEM SCHOOL DISTRICT

Substitute Teacher (K-12)

December 2017 - December 2019 | Salem, NH

COMMUNITY INVOLVEMENT

SQUASHBUSTERS

High School Academic Tutor

September 2017 - Present | Boston, MA

- Mentor high school students by assisting with coursework in a variety of disciplines, and with the college application process.

FIRST ROBOTICS COMPETITION TEAM 6324

Mentor

September 2017 - December 2019 | Salem, NH

- Supervised a team of 30 high school students throughout a six-week design & build phase followed by a 2 month competition season.
- Facilitated sessions designed to foster students' strategic planning and leadership skills.
- Guided sub-team composed of 6 students in designing and implementing the electrical subsystem of a 120 pound robot.

Student

September 2016 - May 2017 | Salem, NH

- Elected student coach and electrical sub-team lead of a 20 student organization
- Advanced to the 2017 FRC World Championships.