Patrick Barry

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Education

Rutgers University - New Brunswick
B.S. Computer Science

GPA: 3.83
Sept. 2019 – Dec. 2021

- **Relevant Coursework**: Data Structures and Algorithms, Computer Architecture, Software Methodology, Internet Technology, Artificial Intelligence, Intro to Data Science, Design, and Analysis of Computer Algorithms
- **Extracurriculars**: RUMAD, HACKRU
- **Dean's List:** Awarded all semesters

Lehigh University
B.S. Chemical Engineering

GPA: 3.17
Aug. 2012 – Dec. 2016

- **Relevant Coursework**: Methods of Analysis in Chemical Engineering (programmed in **MATLAB**), Introduction to heat transfer (programmed in MATLAB)
- **Extracurriculars**: Global Brigades Co-Founder and President, Club Lacrosse
- **Dean's List:** Awarded 2012 Fall Semester, 2013 Spring Semester

Experience

Johnson Matthey-Clean Air
Process Control Engineer

Wayne, PA
Apr. 2017 – Jul. 2018

- Supervised team of five technicians on manufacturing process while operating a 100 yard assembly line equipped with complex machinery, ovens, and automated robots
- Produced 2000 diesel catalytic converters per hour which are used in diesel trucks to reduce carbon emissions
- Diagnosed manufacturing line breakdown causes and engineered solutions to get line fully operational quickly and safely

Social Still
Co-Distiller

Bethlehem, PA
Feb. 2017 - Apr. 2017

- Incorporated 5 heat sensors into a distillation column to accurately track temperature profiles to produce a better tasting liquor

Reclaim Physical Therapy
Physical Therapy Assistant

Marlton, NJ
Feb. 2021- Nov. 2021

- Assisted physical therapist by keeping records of every patient and their corresponding treatments
- Communicated with patients to ensure that the exercises and stretches were performed properly and comfortably

Teaching

Lehigh University Chemical Engineering Department
Unit Operations Teaching Assistant

Bethlehem, PA
Aug. 2016 – April 2017

- Challenged 20 students in the Unit Operations Laboratory to collaborate and apply theoretical concepts learned in class to practical chemical engineering processes
- Prepared each experiment prior to student arrival to ensure a smooth startup for each experiment

Projects

Text-Based Chess
- Created a two-player text-based chess game in **Java** that is playable in a GUI designed using **JavaFX** and **Scene Builder**
- Applied OOP principles to design game and implemented serialization to store data for previous moves

Song Library GUI
- Created a GUI to add, delete, and edit song titles, artists, year, and albums from song data stored in a text file for persistence
- Designed GUI using **JavaFX** and **Scene Builder** to allow the user to add, edit, delete and view details of a selected song

Skills

Languages	Python, Javascript, Java, C, C++, HTML, CSS, MATLAB
Tools	Git