

## EDUCATION

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- **Lower Moreland High School** Huntingdon Valley, PA  
*Rigorous STEM Oriented AP Courseload* *Sept. 2016 – June 2020*
- **Princeton University; Center for Computational Intractability** Princeton, NJ  
*Program in Algorithmic & Combinatorial Thinking* *Summer 2018*

## EXPERIENCE

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- **Extracurricular** Lower Moreland HS & Others
  - **Founder and President of the LMHS Computer Science [Coding] Club:** Organized and managed a club dedicated to coding, solving Computer Science problems, and hackathon-style development.
  - **Recurring Volunteer Leader & Teacher of the Pine Road Elementary Coding & Robotics Clubs:** Assisted with the leadership of a large group of elementary school students working on introductory robotics, in addition to teaching introductory Python & CS concepts to a select group.
  - **SPDL Public Forum Debate Finalist, Judge, & Team Captain:** Competed and Judged in the Southern Pennsylvania Debate League, specifically in Public Forum, which covers a multitude of both foreign and domestic socio-economic topics. Served as captain of the Debate Team during my final year.
  - **LMHS Chess Team:** Competed in the Lower Bucks County Scholastic Chess League on the LM Team.
  - **Mathematics Team Captain:** Led a team from LM in an Inter-Scholastic online mathematics league, in addition to being a leader of the LM Math Club, which acts as a meeting place for students passionate about mathematics.
  - **Frequent Hackathon Participant & Winner:** Frequent team leadership positions in regional & national hackathons, e.g HackGFS, CodeDay Philly, PennApps, PennApps Retro.
  - **Campus Ambassador for PennApps:** Participated in a campaign to encourage people to join CS by helping spread information about PennApps, one of the largest hackathons in the US.

- **Projects**

- Complete portfolio available on GitHub*
  - **Reconstruction of Phylogenetic Trees via Levenshtein Distances of RNA:** Study conducted to the evaluate the effectiveness of using the edit distance (Levenshtein Distance) between RNA sequences of species in reconstructing their phylogenetic tree.
  - \* **Notable Awards:** PJAS Director's award for "Most Outstanding Senior High Project in the area of Computer Science"; Schrödinger Award for Excellence in Student Science Research; Biophysical Society Award; US Dept. of Agriculture Future Scientist Award; Regional, State, and Interstate First & Second Places across the PJAS, MontCo, and DelVal Science Fairs
  - **Diagnosing Malignant Breast Tumors via Machine Learning:** Study conducted to test the application of machine learning algorithms in the diagnosis of malignant breast tumors, based on numerical data extracted from fine needle aspiration.
  - \* **Technologies:** Python, SKLearn, Pandas, Scipy      **Notable Awards:** Regional & State First Places at PJAS; Villanova Award for Applied Statistical Analysis; First Place in C500 (Computer Science) at MontCo Science Fair

- **Academic** Lower Moreland HS & Virtual High School  
*Complete transcript available upon request* *Sept. 2016 – June 2020*

- **AP Computer Science A [A+]:** The course emphasizes object-oriented programming methodology in Java, especially problem solving and algorithm development, plus an overview of data structures and abstraction.
- **Computational Science & Engineering [A+]:** The focus of the course is on scientific programming and using the Java language as a tool in building mathematical models.
- **Independent Study [Pass]:** Self guided study on the analysis of popular computational algorithms.
- **Research, Design, & Evaluation [A]:** Semester class on statistical analysis of data in application to research.

## SKILLS

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- **Java:** Extensive experience with Java for both application development and scientific computation.
- **Python:** Developed numerous projects, research studies, simulations, and scripts in Python 3.
- **Web Development:** Introductory knowledge of HTML5, CSS3, JS, and multiple web-oriented frameworks.
- **Deep Learning:** Introductory knowledge & application of machine learning technologies, e.g Supervised & Unsupervised Learning, Deep Learning, etc.
- **Languages:** Fluent in English & Russian; Proficient in Hebrew & Spanish.