

# Andy Xiao

Rockville, MD

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## EDUCATION

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**University of Pennsylvania – School of Engineering & Applied Science** May 2022  
B.S.E., Computer Science 3.58/4.00

- Coursework: Data Structures & Algorithms, Discrete Math, Linear Algebra, Theory of Computation

**Thomas S. Wootton High School** May 2018

- Honors: National AP Scholar, Governor's Merit Scholastic Award (Top 5% GPA) 4.81 (W)/4.00 (UW)
- Test Scores: ACT: 35, SATII Math II: 800, SATII Physics: 800

## PROFESSIONAL EXPERIENCE

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**Orion**, Software Developer, Philadelphia, PA Oct. 2018 – Present

- Working closely with founders of home entertainment startup. Implementing Node server API with MySQL database to handle login registration pipeline.
- Developing React Native front-end to allow users to login, signup, and interact with server API to alter user settings.

**Mayo Clinic**, Research Intern, Scottsdale, AZ June 2016 – August 2016

- Conducted research on cellular heterogeneity and analyzed embryonic stem cell gene expression data.
- Utilized R Programming to perform statistical analysis on single cell expression data, investigating causes for cell-to-cell differences.

## PROJECTS

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**Spaceship Attack** [github.com/andyxiao1/spaceship-attack](https://github.com/andyxiao1/spaceship-attack)

- (Java Swing) Developed a spaceship shooter game with multiple screens, File IO to keep track of levels and high scores, collision detection, data structures to store the objects on screen, and a class hierarchy for game objects.
- Wrote JUnit tests to ensure that the model of the game was working correctly.

**Conway's Game of Life** [github.com/andyxiao1/game-of-life](https://github.com/andyxiao1/game-of-life)

- (React) Recreated Conway's game of life to simulate cellular automaton. Allow users to select the cells they want to be alive, keep count of the generation, and iterate through generations.

## PROGRAMMING SKILLS

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- **Languages:** Java, HTML/CSS, JavaScript, OCaml, Swift, SQL, LaTeX, R Programming
- **Dev. Technologies:** React, React Native, Node, Git

## AWARDS & ACHIEVEMENTS

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- 6<sup>th</sup> Place, University of Maryland Programming Competition (Teams) 2017
- 3<sup>rd</sup> Place, Montgomery College Programming Competition (Pairs) 2017