

# Jieruei Chang

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## Education

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**Princeton High School**, Princeton, NJ

Current GPA: 4.0/4.0 (unweighted)

Relevant coursework: Java, Object-Oriented Programming, Precalc, Geometry, Biology I, Chemistry I

## Awards

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**USA Computing Olympiad**: Gold

**AMC 10**: 96.0 | **PSAT**: 1490

**Violin**: Winner of Scholarship and Concerto Awards at Westminster Conservatory

**HackPHS 2021**: Math solver with OCR and handwriting capabilities (1st overall, best hardware hack)

## Experience

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**Princeton Soccer Robotics** (2021-)

*Lead Programmer*

- Integrate complex hardware and software, design intelligent robot sensor and movement algorithms
- Reached out to companies for sponsorships, competed in national RoboCup Junior competition

**PHS Algorithms Club** (2020-)

*Captain*

- Teach algorithms and data structures to 15 members weekly
- Participate in national competitive programming competitions such as USACO and Philadelphia Classic

**PHS Game Development Club** (2021-)

*Founder*

- Teach concepts of game design and game development to 10 members weekly

**Program in Algorithmic and Combinatorial Thinking** (2020-2021)

*Student, Mentor*

- Selected to participate in five-week summer programs and year-long advanced program in theoretical computer science funded by National Science Foundation
- Mentored beginners on problem sets and homework assignments

**PHS Math Team** (2020-)

- Meet weekly to solve challenging problems in individual and team settings, participate in national competitions including MMATHS, AMC and CMIMC

**Kickside Martial Arts** (2012-)

*Instructor*

- Taught classes in martial arts while emphasizing the importance of discipline and self-control
- Led warm-ups, exercises and sparring sessions

## Projects

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**Set Game Solver**: Created computer vision card recognition system to play pattern finding game

**Tres**: Cloud-based online multiplayer Uno clone

**cmdpxl**: Cross-platform terminal-based image editor using Python and OpenCV

## Skills

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**Languages**: Fluent in Python and HTML/CSS/Javascript, Proficient in Java and C++

**Technologies**: Flask, OpenCV, Git, Linux, LaTeX