

Vishal Chandra

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EDUCATION

Concord-Carlisle High School Class of 2021; National Honor Society, Engineering Certificate
GPA: 4.27/4 (weighted)

RESEARCH EXPERIENCE

Research in Mathematics and Geometry (11th-12th)

- Developed a new simulation of kaleidocycles—a class of ring linkages—adapted from a combination of past mathematics and computer graphics literature, to be used in designing toys for children
- Academic paper pending submission, covering the novel work and its potential applications in mechanics, art, and amusement

EXTRACURRICULAR ACTIVITIES

Student Body President (9th-12th)

- Lead the development and planning of new school events
- Serve as the interface between administration and student body
- Introduced online ordering for school-branded merchandise

Robotics Team Software Captain (11th-12th)

- Led the development of robotics control systems for the 2020 and 2021 FIRST Robotics Competitions (member of the development team in the 2018 and 2019 competitions)
- Gained experience working with sensors, motion control, and embedded systems
- Mentored new members and held workshops in programming for FRC

VOLUNTEER EXPERIENCE

Discovery Science Museum, Volunteer (Jan-Dec 2019)

- Created a digital simulation of harmonograph tables
- Ran interactive exhibits such as light experiments and sand pendulums
- Helped to foster a love for science in young museum visitors

TECHNICAL SKILLS

Arduino/Microcontrollers (circuit design and programming)

Programming Languages:

| Proficient: Java, Python, Processing, Javascript, Git

| Familiar: HTML/CSS, C#, Dart, GLSL

HONORS, AWARDS, AND SPECIAL RECOGNITIONS

USA Computing Olympiad, Silver Division (2020)

AP Scholar with Distinction (2020)

Mass Audubon Recognition for Climate Justice (2019)

President's Volunteer Service Award (2019)

National Spanish Exam, Gold Medalist (2018)

INTERESTS AND HOBBIES

Presidential History, Rubik's Cubes, Mini Crosswords, Computer Generated Art, Biking