# **Lucas Flowers**

Phoenix, AZ · (602) 784-2043 · lucasdflowers@gmail.com · lucasflowers.net



### **HONORS**

Member, May 2023
Dean's List Nominee, March 2023
FRC LA Regional Winners, March 2023
Best Programmer, May 2023
National Junior Honor Society, May 2021–2022
Arizona Science Fair Finalist, March 2020

National Society of High School Scholars
Phoenix Robotics, Phoenix, AZ
Phoenix Robotics, El Segundo, CA
Phoenix Robotics, Phoenix, AZ
Explorer Middle School, Phoenix, AZ
Benchmark Elementary, Phoenix, AZ

#### **LEADERSHIP**

Control Systems Sub-Team Lead, August 2024-Present

Dragon Robotics, Phoenix, AZ

- Mentored rookies in programming the robot using Java WPILib.
- Programmed robot's autonomous and teleoperated modes for competition.

Treasurer, May 2023-May 2024

Phoenix Robotics, Phoenix, AZ

• Managed purchase orders and maintained the team budget to ensure financial stability.

Lead Programmer, January 2023-May 2024

Phoenix Robotics, Phoenix, AZ

- Developed and programmed the robot's autonomous and teleoperated modes.
- Integrated sensors and vision processing systems for enhanced robot performance.
- Educated new members on programming techniques and robot operation.
- Troubleshoot programming bugs and resolve technical issues to optimize functionality.

#### **ACTIVITIES**

Participant, July 2024

ImpactLab Pre-college Program - Introduction to Robotics Engineering, Wentworth Institute of Technology, Boston, MA

- Engineered robotic systems using CAD, 3D printing, and microcontroller programming for automated tasks.
- Built and tested circuits, integrating sensors and actuators to enhance robot functionality.
- Collaborated in team-based projects, from design through iterative testing, while analyzing the ethical impacts of robotics.

## **Graduating Member**, July 2023

Leadership Society of Arizona Summer Program, Phoenix, AZ

- Participated in workshops on leadership, decision-making, and stress management.
- Collaborated with mentors and industry experts, exploring career opportunities and networking.
- Developed a personal project applying leadership principles to real-world challenges.
- Practiced public speaking and presentation skills, enhancing confidence and communication.

#### 2nd Degree Brown Belt, August 2014-2023

Scottsdale Martial Arts Center, Scottsdale, AZ

Sparred weekly to develop skills and resilience.

- Placed third in the USA Karate Arizona City Championship.
- Advanced through quarterly belt tests.

#### Student Ambassador, August 2022

Explorer Middle School New Student Orientation, Phoenix, AZ

- Led tours for incoming 7th graders.
- Spoke on a Q&A panel for new students.
- Organized get-to-know-you activities to welcome new students.

# First Clarinet, August 2019–2022

Honor Band, Explorer Middle School Band, Phoenix, AZ

- Performed in exclusive honor band concerts.
- Played multiple solo parts as First Clarinet.

# Founding Member, August 2018-2020

GenYES Benchmark School, Phoenix, AZ

- Maintained computers and technology around the school.
- Assisted STEAM classes by teaching 3D modeling and 3D printing.
- Produced instructional videos on technology applications.
- Developed and maintained the school's portal website with resources for students.

#### **CERTIFICATIONS**

ImpactLab Pre-college Program - Introduction to Robotics Engineering, Wentworth Institute of Technology, July 2024

IT Specialist - Java, Certiport - A Pearson VUE Business, May 2024

IT Specialist - HTML and CSS, Certiport - A Pearson VUE Business, April 2024

IT Specialist - JavaScript, Certiport - A Pearson VUE Business, April 2024

IT Specialist - Python, Certiport - A Pearson VUE Business, March 2024

<u>Software and App Design Technical Skills Assessment</u>, Arizona Career and Technical Education Quality Commission, March 2024

CS50x 2023, EdX, Harvard University, January 2024

#### **SKILLS**

HTML/CSS  $\star \star \star \star \star$ Python  $\star \star \star \star \star$ Java  $\star \star \star \star \star$ Javascript  $\star \star \star \star \star$ Linux  $\star \star \star \star \star$ C  $\star \star \star \star \star$ React  $\star \star \star \star \star \star$