

Alessandro Bonecchi

High School Student (Class of 2025)

Experience

CEO / CFO / Co-Founder

RC Design Bureau

Spring 2024-Present

Leading hardware and software initiatives to create the future of RC! At RCDB, I work with my associates to adapt existing and innovate new technologies and products to enhance RC racers' experience!

Software Specialist and Electronics Team Lead

FRC 4014, Pixelators

Spring 2024-Present

Programmed of various robot functions and operational modes in C++, Python, and Rust. Also helped with fundraising activities and grant applications. As the electronics team lead, I spearhead design changes and initiative to make the best use of our robot's "smart" hardware.

Founder/Leader

*Stanford Online High School
Cryptography and
Cybersecurity Research Club*

Fall 2023-Present

In my position at this club, I lead a cohort of motivated student researchers as we tackle cybersecurity issues such as credential integrity and vulnerabilities in the Linux kernel.

Summer Intern

Columbia Engineering SHAPE

Summer 2024

Was accepted to a very competitive program (sub-10%) and trained in many aspects of efficient programming, including quantum algorithm design. Also completed a project utilizing a machine learning to make profitable stock trades. This algorithm won first place at the in-house competition, making 300% of the next finisher's gross profit.

Summer Intern

Ivy Entrepreneurs

Summer 2024

Interned with Columbia University professor Michael McGuire along with two other members of our startup, the RC Design Bureau, to improve and rapidly establish our startup in this period under his guidance.

Research Intern

*Science Mentorship
Institute (Sci-MI)*

Summer 2023-Present

Pursued independent research in the field of computer vision, particularly regarding possible improvements to the accuracy and efficiency of object detection done by autonomous vehicles.

Research Intern

*National High School Journal
of Science (NHSJS)*

Summer 2023-Present

I was admitted to this research program with 6 others from a pool of about 750 applicants. In this internship, we are researching AI/ML in cybersecurity Capture the Flag challenges.

Team Captain

FTC 5206, The Knights of Ni

Spring 2023-Spring 2024

As a captain, I have had to coordinate with and lead two teams, software and hardware, as well as help conduct outreach activities and organize the team to effectively compete in tournaments.

Education

Stanford Online High School

Fall 2021-Present

AP Calculus BC
AP Computer Science A
AP Physics C: Mechanics
AP Physics C Electricity and Magnetism
Multivariable Calculus
Discrete Mathematics
Geometry of Numbers
Linear Algebra
Differential Equations
Computational Logic
Number Theory
Light & Heat (Thermodynamics)
Modern Physics
Advanced Topics in CS: Computer Systems

Modesto Junior College

Fall 2021-Present

Spanish for Spanish Speakers 1
Spanish for Spanish Speakers 2
Problem Solving and Programming 2
Financial Accounting

Stanford Summer Institutes

Summer 2021

Course in Biology Research:
Presented work on the
connection between
gastrointestinal and
mental health.

Johns Hopkins Center for Talented Youth

Fall 2023-Spring 2024
AP Biology

Skills

Programming Languages: Python, Java, Rust, C++, JavaScript, C#	Software Libraries: TensorFlow, PyTorch, Keras, matplotlib, numpy, OpenCV, Flask	Spoken Languages: Italiano (ILR Native) English (ESL) (ILR Fluent) Español (ILR Fluent)
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Other Software: Android Development, Web Development, GitHub
Repository Administration, Version Control, Machine Learning,
Computer Vision

Linux Distributions: Ubuntu, Debian, Arch, Gentoo, SUSE	Hardware: CAD, 3D Printing, Soldering, Welding, Plasma Cutting	Business/Finance: Entrepreneurship, Financial Accounting, Project Management
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Contact



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<https://albonec.github.io/>



<https://www.linkedin.com/in/alessandro-bonecchi-42999b275/>