# **RYAN KIACHIAN**

**650-924-6240** [LinkedIn](http://linkedin.com/in/ryan-kiachian) [Github Portfolio](https://ryan-kiachian.github.io/) **Rik29@cornell.edu**

**EDUCATION**

**Cornell University,** Sibley School of Mechanical and Aerospace Engineering, Ithaca, NY **Expected May 2025**Bachelor of Science, Mechanical Engineering

***Relevant Courses:*** Propulsion Aircraft and Rockets, Dimensional Tolerancing, Automotive Eng., Heat Transfer, Electric Drive Vehicle Eng., Digital Manufacturing, Materials Processing and Manufacturing, Thermodynamics, Fluid Dynamics,

System Dynamics, Mechanics of Materials, Dynamics, Mechatronics

**Bellarmine College Preparatory,** San Jose, California **May 2021**

**TECHNICAL EXPERIENCE**

**Northrop Grumman,** El Dorado Hills, CA **Summer 2024**

* Created a spreadsheet that calculates weight, energy consumption, heat dissipation, and volume for a turbo generator system
* Outlined the goals, methods, obstacles, and procedure to find the required heat dissipation for the coolant systems of the generator
* Wrote a thermocouple test procedure which detailed the odds of drift, ways to test accuracy, other possible sources of error, and steps forward
* Performed an exhaustive search for parts by calling and communicating with vendors and suppliers

**Alef Aeronautics,** Santa Clara, CA **Summer 2023**

* Designed, manufactured, and assembled parts for prototype flying car
* Deconstructed/Reassembled batteries + soldered and crimped wires
* Assembled and adjusted motor mounts and propellers
* Used CAD to design a test stand for speed control and flying

**Fluids & Heat Transfer Lab,** Cornell University **Fall 2024**

* Operated wind tunnels, load cells, pressure transducers, anemometers, strain gauges, thermocouples, etc to measure flame temperature, wind velocity, lift and drag, fluid-flow rate, turbulence, airfoil stall, and spark ignition engine performance
* Automated data acquisition, monitored real-time sensor outputs, and analyzed experimental data using LabVIEW

**Mechanical Synthesis Lab,** Cornell University **Spring 2023**

* Led a small team to design a water pump using CAD software
* Machined and successfully built the pump using mills, lathes, 3D-printers, and laser cutters

**System Dynamics Lab,** Cornell University **Fall 2023**

* Designed open and closed loop feedback controllers to meet performance specifications on dynamic response
* Implemented by using oscilloscopes, dynamic signal analyzers, function generators, and proximity sensors

**Mechanics & Materials Lab,** Cornell University **Fall 2023**

* Operated tensile, compression, and torsion machines for acceptance testing and failure analysis

**SKILLS**

**Programs:** LabVIEW, GD&T, CAD (Fusion 360, AutoCAD Electrical/Mechanical, AutoDesk, SOLIDWORKS), MATLAB, Microsoft Excel, Microsoft Powerpoint, and Rapid Prototyping (3D printing)

**LEADERSHIP EXPERIENCE**

**Cornell Men’s Basketball** **August 2021-Present**

*NCAA Division-1 Student-Athlete*

* Developed communication skills to motivate various types of personalities to get the best performances out of individuals and the team as a whole
* Effectively created challenging, yet attainable goals as well as a strategy on how to achieve them
* Established strong work ethic to balance 30+ hour weekly training and travel, while maintaining full course load

**Bellarmine College Preparatory Basketball, Team Captain September 2019-May 2021**