MOHAR KALRA

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SUMMARY

Design-oriented engineering student and artist fascinated by technology's ability to transform the way people interact with their world. Recognized for curiosity and initiative in research and design of autonomous robots and other technical projects. Seeking to leverage proven technical, aesthetic and management skills to develop ergonomic products that vitalize each user's reality.

EDUCATION

Georgia Institute of Technology   **Atlanta, GA**
- Bachelor of Science in Electrical Engineering, GPA: 4.00   *May 2021*

Millburn High School   **Millburn, NJ**
- Valedictorian, National Merit Scholar; GPA: 4.47   *June 2017*

WORK EXPERIENCE

ADAPTIVE DIGITAL MEDIA LAB   **Atlanta, GA**
Paid Student Researcher under Dr. Brian Magerko   *January 2018 - Present*
- Develop wifi-enabled tangible interfaces for TuneTable platform to teach children programming principles through music

THE TECHNIQUE   **Atlanta, GA**
Staff Writer and Cartoonist for the Georgia Institute of Technology's Student Newspaper   *August 2017 - Present*
- Created and illustrated the Technique's first ongoing weekly comic strip "Technobabble", and write weekly film reviews

RESEARCH

VIP ROBOSENSE   **Atlanta, GA**
Student Researcher / Vertically Integrated Project Program   *August 2017 – December 2017*
- Redesigned and tested internal structures of Autonomous Underwater Robot to improve reliability and user-friendliness

FEASIBILITY OF SPACE ELEVATORS   **New Brunswick, NJ**
Rutgers Student researcher / New Jersey Governor's School of Engineering and Technology   *June 2016 – July 2016*
- Researched the production and deployment of space elevators to determine the technological feasibility of space elevators
- Designed and Stress-tested 3D models of carbon nanofiber weaves to determine the strongest elevator cable weave

PROJECTS

BILING-URL   **Hackensack, NJ**
- A Hack built in 24 hours at the hackathon HackBCA III   *April 2016*
- Built a Google Chrome Extension in JavaScript that helps users learn new languages through their daily internet usage
- Awarded "Best Humanities" and "Best Education" Hack out of the 500 attendees

"WORLD-CHANGING"   **Millburn, NJ**
- 11-page self-published Comic about my thoughts on perspective and fulfillment   *September 2016 – January 2017*
- One of 251 Scholastic Gold Key Regional Award winners out of 4,200 East-Coast entrants

LEADERSHIP

HACKMHS IV   **Millburn, NJ**
Head of Budget / Millburn High School's MLH-Sponsored 24-hour Hackathon   *December 2016 – May 2017*
- Acquired $2,500 dollars in sponsorship and donations from companies and community members
- Procured 450 free and discounted meals from 6 Millburn Restaurants to provide complimentary meals for the 110 attendees

FTC ROBOTICS TEAM 8405   **Millburn, NJ**
Build Team Captain / Millburn's First Technology Challenge (FTC) Team   *September 2015 – Feb 2017*
- Managed the design, construction and maintenance of the FTC competition robot and managed the team's $15,000 budget

SKILLS

Engineering: Robotics, CAD, product design, statics, CNC, SolidWorks, Java, Matlab, Javascript (novice), Arduino, VBA, CSS and HTML (novice), digital system design, analog circuit design, 3D Printing, assembly programming (novice), SketchUp
Communication: Technical document writing, data presentation, mentoring, public speaking, Word, Excel, PowerPoint
Arts: Sequential art, graphic design, illustration, film production, screenwriting, directing, Adobe Creative Suite
Languages: English (Native), Spanish (Intermediate)