**Michael Finn-Henry**

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**Education:**

**Vanderbilt University** Class of 2022

* Bruce and Bridget Evan’s Entrepreneurship Scholar
* Vanderbilt Innovation and Entrepreneurship Society
* SyBBURE Searle Undergraduate Research Program
* Mechanical Engineering Major
* Business and Math Minors

**Brimmer and May High School** Class of 2018

* Departmental Science Award
* Brimmer and May Scholar Society
* STEAM Diploma Program

**Engineering Entrepreneurial Experience:**

**Vanderbilt Research CREATE:** January 2019 to present

*Researcher in Lab of Dr. Michael Goldfarb*

Lead researcher on fall-prevention project lovingly nicknamed the “Geriatric JetPack”. Goal is to use compressed gas jetpack to prevent older adults from falling, a $50 billion issue in the US. While project still in proof of concept phase, in the future, I would love to help bring it to market. I have been leading the overall design and testing of the prototype. This involves developing a proof of concept propulsion model and the design and testing of the prototype of the propulsion system.

**SyBBURE Searle Undergraduate Research Program:** Spring 2019 to present

Active member of the SyBBURE program at Vanderbilt, a research and design program that teaches students about real-world innovation. Gaining experience on the cutting edge of technology with a research requirement, and real-world startup experience with Zero to One projects, such as a new take on a generator shoe, and a new recycling sorting robot that is just starting up.

* **Student mentor in the program’s maker space**, training others to use the tools available to them.

**Researcher at the Mechatronics Research Lab at MIT.** June to August 2016 & 2017

<https://www.rdmag.com/news/2017/07/using-robots-prevent-water-gas-leaks-they-happen>

*Researcher in Lab of Professor Kamal Youcef-Toumi*

**Leak Detection Robot technology**

In a team of four, developed a groundbreaking leak detection robot which can find and fix leaks in water pipes, saving scarce freshwater and preventing pipe bursts. My contribution focused on the development of the sensing membrane. As a co-author on the patents and a co-founder of this technology, I helped turn this robot into reality along with the company Pipe Guard. Before I came to Vanderbilt, a large utilities company that acquired Pipe Guard.

Team Awards:

* Finalist in the MIT $100K Entrepreneurship Competition
* 2017 MIT Water Innovation competition
* 2017 Booz Allen Hamilton Data Analytics Award
* 2017 Infy Maker Award from Infosys Foundation

**Cellphone Recycling Robot technology:**

Worked on the design of the disassembly tool, and the recognition of technological components through a computer vision project where I trained the recognition AI.

**Local to International Climbing Impact**

**Vanderbilt Climbing Team:** September 2018 to present

*Founding member and current president of the Vanderbilt Climbing Club*

This startup organization, founded last year, has grown from 5 to more than 25 members and quadrupled in funding. We placed 3rd in the country out of 98 teams for speed climbing at the Collegiate National Championships last year. I negotiate both corporate sponsorships and local support with various off-campus facilities for the club as we strive to better the Vanderbilt and local climbing communities.

**USA Climbing Teams:** July 2015 to present

Reigning Collegiate National Speed Climbing Champion, ranked 9th in the world for men at the 2018 Villars World Cup, and Bronze medalist at the 2017 Youth World Championships. Served on 7 USA teams and considered a contender for 2024 Paris Olympics. Gained experience in negotiating partnerships and contracts with numerous corporate sponsors for myself, for my teams, and to help improve the training facilities at various venues. Coached at the club level in Boston and now in Nashville.

Notable Results:

* 2019 Collegiate Nationals: 1st
* 2018 Villars Men’s World Cup: 9th
* 2017 Youth World Championships: 3rd
* 2017 Youth Nationals: 2nd