

# Kush Bandi

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## Education

**Georgia Institute of Technology**, Atlanta, GA August 2022 – May 2026 (Expected)

- Candidate for Bachelor of Engineering in Aerospace Engineering
- GPA 4.0/4.0
- Honors Program

**Winchester Thurston High School**, Pittsburgh, PA August 2018 – May 2022

- High School Diploma, GPA 4.40/3.98
- FIRST Dean's List Award
- 2022 TribLive Outstanding Youth Citizen

## Experience

**Internship at GENIXUS**, Pittsburgh, PA May 2021 – August 2021

*Product Designer and Financial Model Developer*

- Designed, evaluated, and optimized a patent-pending syringe model for future production
- Fabricated a 50-page financial model to predict sales over 25 years, incorporating product logistics and market conditions

## Skills

**CAD and Simulation:** Autodesk Fusion 360, Dassault Systèmes CATIA, SOLIDWORKS, Ansys

**Programming:** Java, Python, MATLAB

**Concepts:** 3D-Modeling, Multivariable calculus, Discrete mathematics, Linear algebra, Object-oriented programming, Data structures, Machine learning & ethics

**Clubs:** HyTech Racing (Formula SAE, Aero Sub-team)

**Instrumentation:** Advanced machining and manufacturing, basic electrical

**Communication** Presentations, lab write-ups, email, meetings

## Research

**Researcher at the Human Engineering Research Laboratories (HERL)**, Pittsburgh, PA August 2021 – January 2022

*Cueing Kitchen Technology Developer*

- Designed a speech-to-command architecture to enhance kitchen automation
- Established a foundation for a smart-shelf network for the kitchen
- Worked with and received feedback from professionals in the industry to develop effective systems for the project

## Projects

**FIRST Tech Challenge Mechanical Endeavors** August 2017 – May 2022

- 2021-2022 Season: Designed, simulated, and built a five-axis turret capable of extending game elements in multiple directions several feet swiftly and precisely
- 2020-2021 Season: Created rapid transfer system to orient and relocate 5" rings in under 0.7 seconds; designed a high precision multi-axis ring shooter
- 2019-2020 Season: Constructed a spring-loaded collection system to rapidly intake 4" x 4" x 8" blocks at any location and position them precisely
- 2018-2019 Season: Created a lift system capable of raising and stabilizing a 42lb robot in minimal time
- 2017-2018 Season: Designed, iterated, and built a compact intake able to collect 6" x 6" cubes in any orientation

## Leadership

**FIRST Tech Challenge Captain and Mechanical Design Lead** August 2018 – May 2022

- Performed as team captain for an internationally award-winning team
- Led extremely successful designs to world championship competitions
- Mentored and coached over 100 future engineers to enhance the STEM community - taught design basics and programming fundamentals

**Phase 4 Learning Center Organizer** September 2018 – April 2019

- Enhanced an existing program at the Phase 4 Learning Center, a foundation that immerses students from disadvantaged communities into STEM
- Interacted with and mentored several students, giving individualized learning sessions on technical design strategies and computer science concepts