MICHAEL A. BICK

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EDUCATION

Aug 2016 - Present Mechanical Engineering | GPA 3.58/4.0

Georgia Institute of Technology, Atlanta, GA

Dean's List

2nd Year Junior, Expected Graduation June 2020

ACADEMIC PROJECTS

Aug 2016-Present

GT Motorsports | POWERTRAIN TEAM MEMBER

- Simulating engine dynamics with the eventual goal of increasing efficiency and low-end torque by lowering power-band
- Designing and manufacturing improved camshaft to match optimal lift profile

Aug 2016-Present

RoboJackets | Team Member

- Lead design of a 3lb combat robot including CAD, chassis analysis, and weapon optimization
- Manufactured robotic mechanism components using precision machinery including CNC mills, lathes, and waterjets

Aug 2011-Jun 2016

MilkenKnights FRC Team | TEAM CAPTAIN

- Managed the 6-week design and construction of a robot, including rapid prototyping, CAD, manufacturing, and control dynamics
- Created top-down Solidworks models of transmissions, gearboxes, and complex linkages
- Implemented position PID, velocity PID, vision tracking, motion profiles, and path following
- Trained students in CAD and operating precision machinery including a mill, lathe, and CNC router

SEPT 2014-Jun 2016

ASCE Bridge Building Team | TEAM CAPTAIN

• Lead design, analysis, simulation, and construction of a three foot, one pound popsicle stick bridge that withstood over 950 pounds of force

SEPT 2014-Jun 2015

Conrad Spirit of Innovation | Programming/Electrical Lead

• Designed, wired, and programmed LIDAR tracking system for a belt than warned the visually-impaired of threatening obstacles

TECHNICAL SKILLS

SOFTWARE: Solidworks, Autodesk Inventor, Adobe Illustrator, Vim, Word, Excel MANUFACTURING: Haas CNC, Manual Mill, Manual Lathe, Laser Cutter, Waterjet MatLab, Java, Arduino, HTML, CSS, SASS, Android, Python, IATEX

AWARDS & HONORS

Nov 2017	$7^{\rm th}/60$	Georgia Tech ME2110 Design Competition
Apr 2016		FIRST Robotics Orange County Regional
Mar 2015	$3^{\rm rd}/41$	FIRST Robotics Ventura Regional
Mar 2015	$3^{\rm rd}/53$	FIRST Robotics Utah Regional
Oct 2014	International	Conrad Spirit of Innovation Semi-Finalist
Mar 2013	$1^{\rm st}/65$	FIRST Robotics Los Angeles Regional