MICHAEL A. BICK

350 Ferst Drive 329889 Georgia Tech Station Atlanta, GA 30332-1295 US Citizen

 $(747)\hbox{-}227\hbox{-}6723$ michael.bick@gatech.edu

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

CAD Solidworks(7 years), Autodesk Inventor(8 years), Top-down Design, Parametric Design, Surface Modeling

Manufacturing Haas CNC, Manual Mill, Manual Lathe, Laser Cutter, Waterjet, 3D Printer

Programming MatLab, Java, HTML, CSS, SASS, Android, Python, LATEX

Microcontrollers Arduino, NI myRio/roboRio(LabView)

Software Vim, Adobe Illustrator, Word, Excel

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Awards & Honors

Nov 2017		Georgia Tech ME2110 Design Competition
	$2^{\rm nd}/42$	FIRST Robotics Orange County Regional
Mar 2015		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