### A. MICHAEL WEST JR. - Yale University Mechanical Engineering Undergraduate

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### **QUALIFICATIONS**

- Research assistant in electro-mechanical design and manufacturing.
- Experienced in rapid prototyping using 3D printers, laser cutters, and machine shop tools.
- Two years of undergraduate course work including, math, physics, thermodynamics, electrical analysis, mechanical design (using Solidworks 2015 & 2016), statics, dynamics, fluid mechanics, mechatronics, as well as C, and C++ programming.
- Methodical problem solver and creative thinker with excellent leadership, interpersonal and communication skills.
- Proven abilities to work independently and on a team.

#### **EDUCATION**

Yale University, ABET accredited B.S. Degree in Mechanical Engineering, Class of 2018, GPA: 3.45/4.0, Major GPA: 3.54/4.0 Los Osos High School, Class of 2014 Class Rank: 27/800 (Top 3%) GPA 4.42/4.00 SAT: 2060 SAT Math: 780

#### RESEARCH EXPERIENCE

### RESEARCH STUDENT, INDEPENDENT STUDY, YALE UNIVERSITY, SPRING 2017 - PRESENT

• Working on a low-cost microfluidic device to screen persons for diabetes.

### RESEARCH STUDENT, MEDICAL DEVICE DESIGN AND INNOVATION, YALE UNIVERSITY, FALL 2016 - PRESENT

• Participated in Yale's Medical Device Design program in which students are selected by professors to create new medical devices to improve surgical procedures. My team of four Yale undergraduates designed and spent 150 man hours machining a saw guide made of 125 parts to improve sternotomies and decrease complications stemming from sternal non-union.

## INTERN, BRIAN SCASSALETTI'S YALE SOCIAL ROBOTICS LABORATORY, NEW HAVEN, CT, SUMMER 2016

 Design and Manufacturing Engineer for the Maki Expedition Project. Redesigned a robot used to interact with infants to study how infants perceive humanoid robots. Extensively used Solidworks 2015 to model the interior and exterior components of the robot while redesigning its face to perform certain facial expressions to improve infant-robot interaction. Used Arduino to program movements in the robots face. Delivered an oral presentation of final results to faculty, and peers.

# RESEARCH ASSISTANT, BRIAN SCASSALETTI'S YALE SOCIAL ROBOTICS LABORATORY, NEW HAVEN, CT, SPRING 2016

• Software Engineer for the SAR expedition project that placed 30 robots in 30 homes for 30 days to assist families with children who have Autism Spectrum Disorder. My responsibilities involved using the Robot Operating System environment to improve the algorithms that enabled the robot to sense if a child and parent are looking at each other.

#### WORK EXPERIENCE

### CLUSTER TECH, YALE STUDENT TECHNOLOGY COLLABORATIVE (STC), NEW HAVEN, CT, SPRING 2017 - PRESENT

• Supports and maintains public computers and printers on campus, and works with the STC Cluster Operations staff to repair cluster machines, resolve issues with software, and deploy new computers. Receiving training to become hardware specification certified in Dell and Lenovo products.

# DESIGN AIDE, YALE CENTER FOR ENGINEERING INNOVATION AND DESIGN, NEW HAVEN, CT, SPRING 2017 - PRESENT

 Provides theoretical and technical expertise to students seeking help on design projects. Specializes in Solidworks and machine shop tools.

### SUPERVISOR JUNK KING LOS ANGELES, DUARTE, CA, FALL 2012 - PRESENT

• Works for a large scale junk removal service. Learned the business side of a franchise company while also working in the forefront, interacting with numerous customers, and developing interpersonal communication skills.

#### **ACTIVITIES**

### PRESIDENT & VICE PRESIDENT, NATIONAL SOCIETY OF BLACK ENGINEERS CHAPTER AT YALE, FALL 2016-PRESENT

• Founded a tutoring service at New Haven Academy Elementary School. Facilitates chapter meetings, and increases comradery through encouraging African-Americans to continue pursuing science, technology, engineering and math (STEM) fields. Assists in managing organization finances in efforts to sponsor members to attend the national conference.

# VICE PRESIDENT, ZETA PSI FRATERNITY CHAPTER AT YALE, NEW HAVEN, CT, SPRING 2016-PRESENT

Member of the board whose primary role is increasing recruitment, fostering brotherhood, and improving philanthropy, through strong organization and communication skills.

## DEFENSIVE END, YALE UNIVERSITY VARSITY FOOTBALL, NEW HAVEN, CT, FALL 2014 - SUMMER 2016

• Responsibilities included 30+ hours a week of learning schemes, film study, appropriate nutritional intake, strength and conditioning, and encouraging and mentoring my teammates. Exercised extreme discipline and time management.