# Haicheng Charles ZHAO

EDUCATION

Thomas Jefferson High School for Sci and Tech

GPA: 4.523 (weighted), 4.0 (unweighted)

SAT (NEW): 1600

SKILLS

General Purpose: Python • Java • C

Web Development: React • Redux • SCSS • Jekyll • Django

Flask

Other: Git • Linux • ROS • LETEX • MPI •

OpenMP • Messenger Platform

### WORK AND VOLUNTEER EXPERIENCE

#### Summer 2017 PrepFactory Intern

Designed and developed an adaptive diagnostic test using React and Redux for this EdTech startup. The diagnostic quickly determines an estimated score range and confidence level for a student's performance on the ACT.

## 2015 – 17 Student Systems Administrator

Helped set up and maintain school's servers as well as perform other technology-related tasks. Helped develop the TJ Intranet, which students and faculty use to take attendance, post news, and sign up for activities.

# 2016 - 17 TJ IOI Technology and Finance Lead

On planning committee for TJ IOI, which was a seven-hour programming competition. As Technology Lead, I created a restricted Linux virtual machine on which participants programmed. As Finance Lead, I acquired over \$2000 for shirts, food, facilities, and prizes.

# ACADEMIC AND EXTRACURRICULAR ACTIVITIES

#### 2016 - 17 AIM Robotics FRC Team, Lead Programmer

Lead programmer of the FIRST Robotics Competition (FRC) AIM Robotics team. I incorporated as much autonomy into the robot as possible using computer vision and self-correcting steering. Won Innovation in Control Award.

#### 2016 - 17 Senior Computer Team Co-Captain

Wrote and gave weekly lectures on algorithms as well as held contests and selected teams to participate in competitions.

#### Summer 2016

# MIT Lincoln Laboratory Beaver Works Summer Institute

Selected as one of two students from my school to participate in this program at MIT concerning autonomous vehicles. Four-week free summer program where we worked with faculty and students in teams to learn about and program mini autonomous cars.

#### AWARDS AND ACHIEVEMENTS

# MAR 2016 1st Place in IDT Programming Contest

Worked with a partner in this contest held by Innovative Defense Technologies (IDT). We developed a robust package tracking solution. I worked on the mathematical parts, such as calculating the estimated time of arrival. Won \$1500 for school and received tablets.

#### FEB. 2016 Best Website at HackTJ 2016

Worked with team of four to develop website that teaches Mandarin definitions and pronunciations. I mostly worked on speech recognition, text-to-speech, and the front-end. Best website out of 120 teams.

#### MAR 2017 2nd Place in VCU High School Programming Contest

Worked with a team of four in this algorithm contest hosted by the Virginia Commonwealth University.