Thomas Wun

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EDUCATION

University of Maryland, College Park: A. James Clark School of Engineering — GPA: 3.29 | STEM GPA: 3.18
B.S., Civil Engineering | Minor in Sustainability — Expected: May 2021
Scholars: Science and Global Change — Citation Expected: May 2019

EXTRACURRICULAR ACTIVITIES

First Tech Challenge Robotics, Treasurer — 2013-2017
Marriotts Ridge High School, Marriottsville, MD

- Built simultaneously controllable and autonomous robots to complete tasks such as collecting and distributing objects, climbing various obstacles, and grappling onto high beams
- Led the designing of the gear trains and 3-D printed specialized wheels optimized for climbing
- Composed team's engineering notebook by entering daily logs and maintained sketches, photos, and budget

Track and Cross-Country, Team Captain — 2013-2017
Marriotts Ridge High School, Marriottsville, MD

- Competed and won State-level race for events varying from 4x800 meter relays to 5-kilometer races
- Tasked with organizing daily workouts and scheduling team meetings with the younger teammates

COMMUNITY SERVICE

Maryland Science Olympiad, Judge — 2018
Jeong H. Kim Engineering Building, College Park, MD, and *Richie Colosseum, College Park, MD*

- Directed the B and C division Olympiads to their location
- Judged the Helicopters events for Division C contestants for aerodynamics and flight time
- Assisted with awards ceremony management by distributing medals to the winners

First Lego League (FLL) Robotics, Judge — 2013-2016
Mount View Middle School, Marriottsville, MD

- Evaluated, critiqued, and advised 1st-8th grade students on their innovative ideas regarding the annual FLL theme
- Refereed team's Lego robots' mission runs in competitions by recording points accumulation in real time

TECHNICAL EXPERIENCE

Over Sand Vehicle-Engineering Design Project, Sensors sub-team Leader — 2017
Jeong H. Kim Engineering Building, College Park, MD

- Collaborated with a team of eight classmates to design an Over Sand Vehicle (OSV) with a budget of $400
  - Only team among the twelve sections to complete all required and optional, advanced tasks
  - Tasks include navigating through obstacles and distinguishing, weighing, and lifting different metals
- Finalist of the ENES100 Showcase Event, and scored highest in the Materials Identification branch
- Lead the testing and utilization of robotic sensors and assisted the other sub-teams, such as wiring and structural
  - Collected data and improved implementation of color, ultrasonic waves, and magnetic sensors
- Composed and presented argument for the Sustainability and Craftmanship Award to a panel of visiting engineers
- Asked by faculty to permanently exhibit the OSV in the showcase in the James M. Patterson Building

Project Lead the Way: Capstone Project – The Deck Check — 2016-2017
Marriotts Ridge High School, Marriottsville, MD

- Created a fully working scale, named *The Deck Check*, that can count the number of cards in a deck
- Presented *The Deck Check* to several panels of visiting engineers, and successfully competed up to county levels
- Maintained the team's engineering notebook, consisted of ideas, photos, computer drawings, and hand sketches

AFFILIATIONS

American Society of Civil Engineers (ASCE) — 2018-Present

SKILLS

Programs: CAD, 3-D printing, NI multisim, Fritzing, Eclipse, JavaScript, MATLAB, Arduino, HTML, Word, Excel
Materials: Soldering, Breadboarding with microchips and sensors, Machining (especially with CNC milling)

AWARDS

- 10 *Varsity Letters*, Marriotts Ridge Highschool Athletics, for outdoor track, indoor track, and cross country
- *Sustainability Award*, ENES100 Showcase, for assembling the most equitable, bearable, and viable OSV