Michelle Tanaka

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EDUCATION

**University of California, Irvine** Irvine, CA

*B.S. Degree in Mechanical Engineering - GPA: 3.33 /4.0 June 2019*

*Minor in Philosophy*

EXPERIENCE

**Mathnasium** Lake Forest, CA

*Assistant Director January 2017 - Present*

* Evaluate student’s strengths, weaknesses, learning style, and maintain frequent communication with both parents and students to create an individualized curriculum and feasible educational goals
* Increase student retention by managing 3 employees to ensure effective coverage and instruction based on each student’s educational needs for up to 40 students daily

**Sigma Kappa Sorority** Irvine, CA

*Vice President of Finance January 2017 - September 2018*

* Compose a yearly budget, individualized payment plans, and provide resources for members on personal finance that efficiently support our values of community service and personal growth

PROJECTS

**Autonomous Robot** Irvine, CA

*Controls Specialist April 2018 - June 2018*

* Worked in a team of three to develop an autonomous robot that employs a single pneumatic cylinder for propulsion, a servo motor for steering, and an Arduino microcontroller
* Responsible for developing algorithms in Arduino IDE to coordinate the actuator, magnetometer, and reed switch using a closed loop control system to maneuver the robot during competition
* Assisted with design and development of a belt drive and one-way bearing propulsion mechanism

**Spacecraft Thermal Management Systems** Irvine, CA

*Quality Assurance Engineer September 2018 - Present*

* Improved efficiency and accuracy of standard operating procedure by integrating a potentiostat to automate voltage regulation and measurement of current variance
* Analyze changes in resistance in correlation to emissivity of nickel oxide and tungsten films

**Advanced Combustion** Irvine, CA

*Combustion Engineer October 2018 – Present*

* Designed testing apparatus to determine the combustion reaction of a hot air balloon burner
* Analyze emission concentrations of burner exhaust to determine combustion efficiency

AFFILIATIONS

**Order of Omega** - Leadership honor society for members of Fraternity & Sorority organizations who have exemplified high standards in the areas of scholarship, leadership, and involvement

SKILLS

**Languages:** MATLAB, Python

**Software/Platforms:** Microsoft Office, SolidWorks, Arduino