Tai Kao-Sowa

P.O. Box 13905, Stanford, CA 94309 | (703) 969-7166 | tkaosowa@stanford.edu

EDUCATION

Stanford University **Stanford, CA**
BS Candidate in Neuroelectrical Engineering *Expected Graduation: June 2020*
GPA: 3.73
Relevant Coursework: *Linear Dynamical Systems, Introduction to Statistical Signal Processing, Neuroelectrical engineering, Baremetal Comp. Systems, Introduction to Control Systems*

Thomas Jefferson High School for Science and Technology **Alexandria, VA**
Biotechnology Lab *September 2012-June 2016*
GPA: 4.45
Relevant Coursework: *DNA Science, Neurobiology, Organic Chemistry, Analog Electronics, Multi/Linear*

EXPERIENCE

IBEKA **Jakarta, Indonesia**
Electrical Engineering Intern *Summer 2019*
- Developed remote monitoring system for rural microhydroelectric power plants.
- Circuit simulation and design, power electronics, and in-field implementation and testing.

Miroculus Inc. **San Francisco, CA**
Electrical Engineering Intern *Summer 2018*
- Working on digital microfluidics laboratory automation device: circuitry, control systems, firmware.

Neural Prosthetic Systems Lab **Stanford, CA**
Research Assistant *Spring 2018*
- Aid in completing and debugging an autonomous system designed to train reaching tasks for BMI experiments with nonhuman nonhuman primates. Working in Simulink, Matlab and C.
- Worked part-time in Krishna Shenoy's lab under Dr. Michaels

Stanford Integrated Biomedical Systems Lab **Stanford, CA**
REU Intern *Summer 2017*
- Worked on chip design for wireless hippocampal engram circuit neuron stimulation. Potential for memory recovery and reconsolidation in amnesic mice. Worked with Cadence circuit simulations.
- Worked on a team in Dr. Ada Poon's lab led by Dr. Mazi Taghivand. Graduate advisor: Yi Liu

TJHSST Biotechnology Lab **Alexandria, VA**
Original Researcher *September 2015 – June 2016*
- Investigated the effect of Ara h2 peanut allergen on PHA-induced canine dendritic cells as a possible pathway to atopic dermatitis via errant activation.
- Conducting original research with Hasan Ahmad under Dr. Cobb.

Georgetown AVRIC Lab **Georgetown, DC**
Original Researcher *Summer 2015, 2014*
- Summer of 2015: Investigated the effect of folic acid on Treg cell induction in vitro as a possible natural treatment for autoimmune disease.
- Conducting original research sponsored by Dr. Bellanti under Georgetown's department of Microbiology and Immunology.
- Summer of 2014: Interned in Dr. Joseph Bellanti's lab investigating the development and clinical application of interferon gamma release assays (IGRAs) on Tuberculosis.

SKILLS/PROJECTS

- Python, C, C++, Java, Verilog, MATLAB, Simulink, Cadence & Spectre circuit simulation, Eagle/Altium
- Flow cytometry, qPCR, western/southern blotting, polyacrylamide & PAGE gels, electrophysiology
- Stanford Student Space Initiative, biology team 2017-2018. Worked on a device that will synthesize DNA in space. Design involves PCB design, microfluidics, and enzymatic DNA synthesis with TDT
- Brazilian Jiu Jitsu practitioner and avid outdoor adventurist