

Tai Kao-Sowa

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EDUCATION

Stanford University

BS Candidate in Bioelectrical Engineering

GPA: 3.96

Relevant Coursework: Computer Organization and Systems, Circuit Analysis

Stanford, CA

Expected Graduation: June 2020

Thomas Jefferson High School for Science and Technology

USA Biology Olympiad Semifinalist, National Merit Semifinalist

GPA: 4.45

Relevant Coursework: DNA Science, Neurobiology, Organic Chemistry, Analog Electronics, Multi/Linear

Alexandria, VA

September 2012-June 2016

EXPERIENCE

Stanford Integrated Biomedical Systems Lab

REU Intern

Stanford, CA

Summer 2017

- Worked on a project investigating electrical stimulation of hippocampal engram circuit neurons as a potential for memory recovery and reconsolidation in amnesic mice.
- Worked under Yi Liu and Yuji Tanabe in Dr. Ada Poon's lab.

TJHSST Biotechnology Lab

Original Researcher

Alexandria, VA

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

Original Researcher

Georgetown, DC

Summer 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.

Georgetown AVRIC Lab

Research Assistant

Georgetown, DC

Summer 2014

- Interned in Dr. Joseph Bellanti's lab investigating the development and clinical application of interferon gamma release assays (IGRAs) on Tuberculosis.
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SERVICE

Lung Chuan Fa Kung-Fu

Instructor, Third Degree Black Belt

McLean, VA

March 2015 – August 2016

- Taught various classes of students of all skill levels and ages.
- Developed lesson plans, overall training goals, assisted in demonstrations.
- Taught self-defense at Stanford SPLASH program in 2016

TJHSST Medical Society

Co-President

Alexandria, VA

September 2015 – August 2016

- Created lectures, lesson plans, and dissection activities for club of 50+ members.
 - Worked with team of 6 people to manage administrative duties and develop club culture.
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SKILLS

- Java, Python, C++, ARM Assembly, C, MATLAB/Julia, Arduino Programming, Cadence & Spectre
 - Flow cytometry, Buffy coat purification, qPCR, Western/Southern Blotting, DNA computational analysis
 - Electrophysiology & Aplysia californica dissection
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ACTIVITIES

- Worked with team to build interactive linear algebra calculator iOS app at Stanford Treehacks 2017 using Swift
 - Stanford Student Space Initiative
 - Stanford Robotics Club (worked on microcontroller programming & CAD design)
 - Stanford Club Swim Team
 - Stanford Brazilian Jiu Jitsu (responsible for club outreach)
 - 2012-2016 Varsity High School Tennis
 - 2012-2016 Varsity High School Swim
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Links

Personal site: www.tkaosowa.us

Github: github.com/taikaosowa11

LinkedIn: www.linkedin.com/in/tai-kao-sowa-967382120/