

# 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*

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**Alexandria, VA**

*September 2012-June 2016*

## EXPERIENCE

### Stanford Integrated Biomedical Systems Lab

*REU Intern*

**Stanford, CA**

*Summer 2017*

- Investigated electrical stimulation of hippocampal engram circuit neurons as a potential for memory recovery and reconsolidation in amnesic mice.
- Worked under Yi Liu 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
  - 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 (working 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