

Taisuke Yasuda

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EDUCATION

CARNEGIE MELLON UNIVERSITY

BS IN MATHEMATICS

Expected May 2019 | Pittsburgh, PA

Cum. GPA: 3.80

LINKS

Github: [taisuke-yasuda](#)

LinkedIn: [taisuke-yasuda](#)

COURSEWORK

GRADUATE

A Theorist's Toolkit (15-751)

UNDERGRADUATE

Math Studies Algebra I (21-237)

Math Studies Analysis I (21-235)

Probability (21-325)

Functional Programming (15-150)

Vector Analysis (21-269)

Differential Equations (21-261)

Theoretical CS (15-251)

Imperative Computation (15-122)

Matrix Theory (21-242)

Concepts and Proofs (21-128)

Fundamentals of CS (15-112)

SKILLS

PROGRAMMING

Python • C • C++ • \LaTeX

Matlab • Java • Shell • JavaScript

FOREIGN LANGUAGES

Japanese (native speaker)

French (3 years)

Chinese (1 semester)

TEST SCORES

SAT

General: 2310

Mathematics II: 800

Physics: 800

EXPERIENCE

CARNEGIE MELLON | RESEARCH ASSISTANT

Jan 2016 - Present | Pittsburgh, PA

- Worked in Dr. Alison Barth's lab in the neuroscience department
- Analyzed the behavior of SST interneuron-pyramidal neuron synapses using statistical models and computational methods

MAX PLANCK INSTITUTE | PROGRAMMING INTERN

Dec 2014 - Dec 2014 | Jupiter, FL

- Worked in Dr. Hyungbae Kwon's lab
- Created a GUI interface to experimental equipment for neuroscience research through C# and arduino

MAX PLANCK INSTITUTE | RESEARCH INTERN

Jun 2014 - Aug 2014 | Jupiter, FL

- Worked in Dr. Hyungbae Kwon's lab for Summer Research Internship program
- Wrote a Java program used in a virtual reality system used to monitor brain activity of mice
- Mathematically derived geometric transformation mapping 2D game images to a 3D virtual reality experience
- Incorporated the transformation into the virtual reality system via Unity game engine

PROJECTS

LYRIKI | TARTANHACKS 2016

Feb 2016 - Feb 2016 | Pittsburgh, PA

- Created a web app with Flask for automatically generating songs to lyrics
- Awarded Top 3 at TartanHacks 2016

DENDRITE TRACE | 15-112 TERM PROJECT

Nov 2015 - Dec 2015 | Pittsburgh, PA

- Wrote a Python program for manual and automatic tracking of dendrites on 3D images
- Generated thousands of training data images automatically using the manual tracking option of program
- Implemented an automatic dendrite tracer using machine learning on the generated data

AWARDS

2016 Dean's List (Fall 2015, Spring 2016)

2016 Top 3 at TartanHacks 2016

2015 Carnegie Presidential Scholarship

2015 Pathfinder Scholarship Mathematics