

Taisuke Yasuda

MATHEMATICS · COMPUTER SCIENCE

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Education

Carnegie Mellon University

Pittsburgh, PA

HONORS PROGRAM IN MATHEMATICS, ADDITIONAL MAJOR IN COMPUTER SCIENCE

Aug 2015 - May 2019

- Accepted into Honors Math Program, which leads to a MS in mathematics in 4 years
- Awarded Carnegie Scholarship for academic and artistic achievement
- GPA 3.85, Dean's List Fall 2015, Spring 2016

SELECTED COURSEWORK:

A Theorist's Toolkit (15-751), Math Studies Analysis I / Algebra I (21-235 / 21-237), Great Theoretical Ideas in CS (15-251), Functional Programming (15-150), Server Side Scripting with Node (98-294), Modern Version Control with Git (98-174)

Experience

Barth Lab, Neuroscience Dept., Carnegie Mellon University

Pittsburgh, PA

RESEARCH ASSISTANT

Jan 2016 - Present

- Constructed and analyzed a hierarchical statistical model of the behavior of SST-Pyr synapses
- Currently in the process of writing a publication

Miami Japanese School

Miami, FL

WEB DEVELOPER

Aug 2016 - Present

- Rebuilding and modernizing the Miami Japanese School library manage system
- Moving from old Microsoft Access app to a web app built with MEAN and other web technologies

Max Planck Florida Institute for Neuroscience

Jupiter, FL

RESEARCH AND PROGRAMMING INTERN

Jun 2014 - Aug 2014

- Developed 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

Dendrite Trace

Pittsburgh, PA

15-112 TERM PROJECT

Nov 2015 - Dec 2015

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

Honors & Awards

Feb 2016 **Top 3**, TartanHacks

Pittsburgh, PA

Apr 2015 **2nd Place**, Pathfinder Scholarship in Mathematics

Palm Beach, FL

Skills

PROGRAMMING LANGUAGES

Comfortable Python, C, \LaTeX

Familiar Java, Matlab, JavaScript, HTML/CSS

WORLD LANGUAGES

Comfortable Japanese

Familiar Mandarin Chinese