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

ACTIVITIES: Carnegie Mellon Informatics and Mathematics Competition Organizing Team Member, All University Orchestra

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), Probability (21-325), Functional Programming (15-150), Server Side Scripting with Node (98-294), Modern Version Control with Git (98-174)

Experience

Mathematics Dept., Carnegie Mellon University   *Pittsburgh, PA*
PUTNAM SEMINAR (21-295) GRADER   *Sep 2016 - Present*

- Grading homework for Prof. Po-Shen Loh's Putnam Seminar course

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