

Minxing (Tony) Pan

tonypan2000@gmail.com • <https://tonypan.us>

Education

Computer Science Engineering 09/2018 – 04/2022	University of Michigan, Ann Arbor, United States GPA: 3.66 Major GPA: 3.85 Currently Taking: EECS 467 Autonomous Robotics Design Experience Courses Taken: EECS 281 Data Structures and Algorithms, EECS 370 Intro to Computer Organization, EECS 399 Directed Studies, EECS 203 Discrete Math
Stanford Summer Session 06/2017 – 08/2017	Stanford University, Palo Alto, United States GPA: 3.8
High School 01/2016 – 06/2018	University Liggett School, Grosse Pointe, United States Graduated Summa Cum Laude

Research experience

Research Assistant 01/2019 – present	SOAR Cognitive Architecture, Ann Arbor, United States Integrate SOAR cognitive architecture with Anki's Cozmo robots
Research Assistant 10/2018 – present	Shtein Lab, Ann Arbor, United States Develop hardware and software for a kirigami sensor project Design, build, and program a novel 3D printer
International Summer Science Institute 07/2018 – 07/2018	Weizmann Institute of Science, Rehovot, Israel Conducted research project "Making the Invisible Visible: Optimizing Laser Speckle Imaging Using Machine Learning and Targeted Recoloring" with Prof. Vyacheslav Kalchenko

Publication

Machine Learning Assisted Blood Vessel Segmentation in Laser Speckle Imaging 03/2019	Proceedings of Society of Photo-Optical Instrumentation Engineers (SPIE) https://doi.org/10.1117/12.2510378 Gave an oral presentation at the SPIE Photonics West BiOS Conference. <ul style="list-style-type: none">• Wrote ImageJ Macro and Java programs to create montages with different color maps• Trained binary classifiers on FIJI and applied them on stacks with higher statistical noise• Applied sinusoidal, gamma and other math functions to manipulate hue and saturation• Developed a workflow to enhance laser speckle images for real time surgical use
--	---

Awards

University Honors Dean's List 12/2018	University of Michigan College of Engineering
Intel International Science and Engineering Fair (ISEF) Finalist 05/2018	Made my own graphene supercapacitors from inexpensive and available material. Won grand award at Detroit science fair and competed at ISEF
FIRST Robotics Competition (FRC) Dean's List District Finalist 03/2017	Captain of a high school robotics team and mentor of two middle school teams for two years. Dean's List celebrate students with mentorship, leadership, and technical accomplishment.

Skills

Programming

Java, C/C++, ImageJ Macro, Git, HTML, Python, SOAR, MATLAB, Assembly