AMANDA SUTRISNO

ML/ SOFTWARE ENGINEER

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Education

Vanderbilt University, Nashville, TN *Sep 2020 - [2023]*
PhD in Mechanical Engineering - **GPA 3.7/4.0**
Due to circumstances, graduating with MSc coming May 23

Singapore University of Technology And Design, Singapore *May 2013 - Sep 2016*
Bachelor of Science in Engineering Product Development - **GPA 3.5/4.0**

Work experience

Lighthouse Title Insurance *Mar 1 - Present*
Machine Learning/Software Engineer (PART-TIME)
Built software to automatically read and sort scanned legal documents using NLP.

Vanderbilt University *Feb 20 - Present*
PHD Student/Research Assistant
Developed flexible, 3D-printable, "passive mechanisms", devices to store and manipulate energy without an internal power supply. Involves algorithm optimisation and reinforcement learning.

SUTD Singapore
Research Engineer
- Designed and constructed inductor/capacitor(LC) circuits to mimic material properties of topological quantum materials. Involved simulations in Python (Scikit learn). *Jan 19 - Jan 20*
- Theoretical modeling of hypothetical wearable exoskeletons and interaction with the human body using spring/mass models. *May 17 - Jan 19*

Micron Technology Singapore *Janl 19 - Jan 20*
Product Engineer
Responsibilities included diagnosing, characterizing, and providing solutions to defects in NAND flash memory chips affecting high-volume manufacturing yield.

Extracurricular activities

- Quantum Computing Club - Participate in workshops, talks from guest industry speakers, and attend hackathons together. Attended MIT iQuHack 2023 hackathon. *Sep 22 - Present*
- Mentor for undergrad students. *Sep 20 - Present*

Publications and honours

- "How to Run 50% Faster without External Energy", Science Advances, 6(13), eaay1950, (2020). https://www.theguardian.com/science/2020/mar/26/spring-heeled-concept-that-could-see- usain-bolt-rocket-to-50mph *2020*
- "Imaging nodal knots in momentum space through topolectrical circuits", Nature Communications, 11(1), 4385, (2020). *2020*
- A. Sutrisno and D. J. Braun, "Enhancing Mobility with Quasi-passive Variable Stiffness Exoskeletons", IEEE Trans. Neural Syst. Rehabil. Eng., 27(3), 487-496, (2019). *2019*
- H.F. Lau, A. Sutrisno, T. H. Chong, D. J. Braun, "Stiffness modulator: A novel actuator for human augmentation", IEEE Intl. Conf. Robot. Autom. (ICRA), 7742-7748, (2018). *2018*

Soft skills

- Team player
- Problem solver
- Analytical
- Mentor
- Ambitious
- Multitasker

Interest

- Financial markets
- Machine Learning
- Tennis
- Gymnastics

Relevant skills

- Python
- C++
- Dynamics
- SQL
- Microsoft Azure
- Control Theory
- Google Cloud
- JavaScript
- Non-linear Opt
- CSS
- HTML
- Quantum
- Solid State Physics