Ngoc La (Nicole)

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I'm interested in developing an AI assistive system designed to enhance human decision-making in intricate and collaborative environments. In essence, the system should be able to (1) process information and formulate action plans like an experienced instructor, (2) understand human and able to predict their actions like their mother, and (3) communicate with human like their friend. I am seeking a summer internship opportunity that aligns with my research interests and offers the potential for publication.

Education

Massachusetts Institute of Technology — Cambridge, MA
B.S. and M.S. in Aerospace Engineering, current PhD candidate in Aerospace Engineering — *B.S.'2021/M.S.'2023*

- Bachelor of Science in Aerospace Engineering, June 2021, GPA: 5.0/5.0
- Master of Science in Aerospace Engineering, February 2023, GPA: 4.9/5.0

Skills

Technical: Machine Learning – advanced, Python – advanced, MATLAB/Octave – advanced, C/C++ – advanced, ROS – intermediate, Solidworks – advanced, etc.

Activities and Leadership

Lockheed Martin — Shelton, CT
AI/ML Engineer — *Feb 2023 - Aug 2023*

- Working on AI/ML projects under Intelligent Agents team of Lockheed AI Center (LAIC)

Elite Summer School in Robotics — Odense, Denmark
Southern Denmark University — *Aug 2022*

- Participate in an intensive course in various robotic topics and entrepreneurship

AeroVironment — Simi Valley, CA
Robotics Summer Intern — *May 2020 – Aug 2020*

- Work on hardware and software development of an UAV to autonomously achieve certain missions
- Strengthen software skills in ROS, visual based analysis, and simulation

MIT Design Build Fly — Cambridge, MA
Chief Engineer – web.mit.edu/dbf/www/ — *Sep 2018 – Jun 2021*

- Technical lead of the team in designing and building electric aircrafts for the national annual flight competition by the American Institute of Aeronautics and Astronautics' Design Build Fly Organization

Research Experience

Massachusetts Institute of Technology – Interactive Robotics Group — Cambridge, MA
Graduate Researcher — *Sep 2020 – Present*

- Work on task planning with temporal and spatial constraints
- Develop human-aware AI assistant to help human manage information and navigation in complex dynamic planning problems

Massachusetts Institute of Technology – Space System Lab — Cambridge, MA
Undergraduate Research Opportunity Program – Space System Laboratory — *Jun 2019 – Nov 2019*

- Responsible for structural fabrication of Astrobee, a robot operating in the International Space Station
- Focusing on redesign and build Central Module and Propulsion Module of the Astrobee

Massachusetts Institute of Technology – Space Propulsion Lab — Cambridge, MA
Undergraduate Research Opportunity Program – Space Propulsion Laboratory — *Feb 2019 – May 2019*

- Design, build, and implement electrical amplifier for propulsion analysis of thrusters in vacuum testing chambers

NASA Jet Propulsion Laboratory — Pasadena, CA
Student Independent Research Intern Program — *Feb 2018 – May 2018*

- Analyze more than 200 spectra from nearby galaxies to look for Hydrogen Fluoride, of which density is found to be highly correlated with water density
- Learn to use Herschel Interactive Processing Environment, use Python to analyze data, write report with LaTex