YIZHOU "VIOLA" TAN

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EDUCATION

Harvard University, Cambridge, MA — Sept 2024 - May 2026
Master in Design Studies, Domain: Technology | GPA: 3.85/4.0 | Merit Grant Recipient

- **Coursework**: *Human-Computer Interaction, Data Science, Data Visualization* (MIT)
- **Teaching Assistantships**: *Mechanical Design, Informal Robotics* (Held **Grasshopper** and **Arduino** workshops)

Rhode Island School of Design, Providence, RI — Aug 2019 - June 2024
Bachelor of Architecture, Minor in Computation | GPA: 3.89/4.0

- **Awards**: Sustainability Innovation Fund ($7,200); Student Research Fund ($4,000); Maharam Fellowship ($5,000).
- **Coursework** (Brown University): *Deep Learning (A), Computer Vision (A), Robotics (A)*

PUBLICATIONS

RhinoAI: An LLM-Based 3D Modeling Assistant for Procedural Instructions and Demonstrations. Qiyao Chen*, Yizhou Tan*, Chung-Ta Hung*. (Submitted)

Identifying Urban Park Events through Computer Vision-Assisted Categorization of Publicly-Available Imagery. Yizhou Tan, Wenjing Li, Da Chen, Waishan Qiu. *ISPRS International Journal of Geo-Information, Vol. 12, Issue 10.*

Developing an Augmented Reality Lunar Surface Navigation System. Kienan Ahner-McHaffie, Selena Yang, Yizhou Tan, Bowen Zhou. *IEEE Aerospace Conference 2023.*

User-Extensible Block-Based Interfaces for Internet of Things Devices as New Educational Tools. Yizhou Tan, Marina Rizk, Gordon Stein, Akos Ledeczi. *IEEE SoutheastCon 2022.*

EXPERIENCE

Abaka.AI — Cambridge, MA
Product Manager Intern — Dec 2024 - Ongoing

- Defined and launched **7** major features for a data engineering platform for AI applications such as autonomous vehicles.
- Mapped client needs with internal stakeholders, created product requirements documents, and designed UX workflows.
- Addressed 3D point cloud data labeling needs for a major client, increasing task efficiency by 80%.

Massachusetts Institute of Technology, Visualization, Inquiry, and Analysis Learning Lab — Cambridge, MA
Research Intern | Advised by Dr. Eric Robsky Huntley — June - May 2024

- Analyzed parcel and business registration data with **Python**, SQL, and GIS to identify corporate landlord networks in MA.
- Visualized corporate land ownership through an interactive community installation using **Arduino** and **Printed Circuit Boards**, receiving a grant for $7,200 and validations from over 50 community members.

Brown University, Human To Robots Lab — Providence, RI
Research Assistant | Advised by Prof. Stefanie Tellex — Aug - Dec 2021

- Developed autonomous drone software stack using **Python**, implementing PID control and state estimation.
- Led training, outreach, and tech support for high school teachers on **Python** and **Robot Operating System**.

Vanderbilt University, Institute for Software Integrated Systems — Nashville, TN
Undergraduate Researcher | Advised by Prof. Akos Ledeczi — June 2021 - Jan 2022

- Designed and modeled virtual robots and environments for an education platform featuring block-based programming.
- Simulated robot functionality using **Unity C#**, and created robot games for classroom engagement.

SKILLS

Design | Rhinoceros 3D (Grasshopper, GH Python), Figma, Adobe Creative Suite
Programming | Python (Scikit-Learn, Pandas, Seaborn, Tensorflow), ROS, C#, HTML/CSS/JavaScript (React, Vue.js)
Electronics & Digital Fabrication | Arduino, Raspberry Pi, Printed Circuit Boards, 3D Printing, Laser Cutting