

# XAVIER THOMAS

✉ [xavierohan1@gmail.com](mailto:xavierohan1@gmail.com) [LinkedIn](#) [Github](#) [Website](#) ☎ (857) 384-8664

## OBJECTIVE

---

Seeking Internship Opportunities for Summer 2024 in the Fields of Machine Learning and Computer Vision Research / Engineering.

## EDUCATION

---

**Boston University, Massachusetts, USA**

Sep 2023 - May 2025

*Master in Science*

Artificial Intelligence

**Manipal Institute of Technology, Karnataka, India**

July 2018 – Aug 2022

*Bachelor of Technology*

Electronics and Instrumentation, (Minor in Computational Intelligence)

## PUBLICATIONS, PREPRINTS, AND WORKING PAPERS

---

**MAViC: Multimodal Active Learning for Video Captioning**

Gyanendra Das, **Xavier Thomas**, Anant Raj, Vikram Gupta | [Paper](#)

**Diversity vs. Recognizability: Human-like generalization in one-shot generative models**

Victor Boutin, Lakshya Singhal, **Xavier Thomas**, Thomas Serre | [Paper](#) | [Code](#)

*Neural Information Processing Systems (NeurIPS), 2022*

**Adaptive Methods for Aggregated Domain Generalization**

**Xavier Thomas**, Dhruv Mahajan, Alex Pentland, Abhimanyu Dubey | [Paper](#) | [Code](#)

## EXPERIENCE

---

**Boston University**

Jan 2024 – Present

*Teaching Assistant*

- Teaching Assistant for CDS DS 598 B1 - Deep Learning for Data Science, with [Prof. Thomas Gardos](#) - [Course Website](#)
- Tasked with Conducting the Weekly Discussion Sessions and Pytorch Tutorials

**ShareChat**

July 2022 – June 2023

*Machine Learning Engineer Intern* | [Advisors: Vikram Gupta, Dr. Hisham Cholakkal, Dr. Anant Raj](#)

- Introduced a new Computer Vision feature representation method into production; improved performance on downstream tasks such as classification, content moderation etc.
- Developed a Web dashboard to create and edit AI Generated content, was used to seed content in ShareChat's platform.
- Engineered and launched Natasha, an AI assistant integrated with ShareChat's messaging service.
- Tech Stack: Python, Streamlit, Django, Docker, Kubernetes, Jenkins, Google Cloud

**Searce Inc**

Jan 2022 – July 2022

*Machine Learning Engineer Intern* | [Certificate](#)

- Developed a Dialogflow ES Chatbot to automate the internal IT helpdesk of a client; automated a variety of use cases ranging from verifying users, unlocking accounts and resetting passwords.
- Tech Stack: Google Dialogflow ES, Google Cloud Functions, Node.js

**Serre Lab, Brown University**

Sept 2021 – May 2022

*Research Intern* | [Advisors: Dr. Thomas Serre, Dr. Victor Boutin](#)

- Created a new framework to evaluate one-shot generative models along two axes: sample recognizability vs. diversity
- Conducted a systematic evaluation of representative one-shot generative models against Human performance on the Omniglot handwritten dataset, using this framework.
- [Code](#) | [Paper](#)

**Massachusetts Institute of Technology**

Jan 2021 – Nov 2021

*Research Assistant* | [Advisors: Dr. Abhimanyu Dubey, Dr. Dhruv Mahajan, Dr. Alex Pentland](#)

- Worked on an algorithm that recovers domain information in an unsupervised manner, by carefully removing class-specific noise from features, which is used to learn a domain-adaptive classifier.
- Obtained improved performance in standard domain generalization datasets such as PACS(+3.4%), VLCS(+2.5%), OfficeHome(+0.5%), DomainNet(+1.9%), and TerraIncognita(+1.7%) etc, compared to ERM.
- [Code](#) | [Paper](#)

## EXTRACURRICULAR

---

- \* The MIT Post - Staff Writer - Sep 2019 - Jan 2020.
- \* Contributor - FanSided - May 2019 - Dec 2019
- \* PyData Manipal - Core Committee member of PyData's Local Chapter at Manipal.