**Vishnu Garigipati**

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**BACKGROUND**

I am undergraduate student with a strong passion for interdisciplinary fields especially machine learning and information theory. I am also particularly interested in research opportunities and have experience conducting research within companies.

**EDUCATION**

**Universidad Carlos III en Madrid** – Department of Data Science and Engineering (Madrid, Spain) September 2024– May 2025

*Bachelor of Data Science*

*(Semester Abroad)*

**Concordia University** – Gina Cody Department of Computer Science and Engineering, Montreal, Canada 2021– present

*Bachelor of Computer Science*

**WORK EXPERIENCE**

**Ericsson,** Montreal Canada May 2024 – present

*Research Intern*

* Conducted interdisciplinary research, bridging statistical mechanics and data science.
* Authored drafts for a patent application and a paper, “On Entropy-Based Distributions”, intended for publication in IEEE journals
* Reviewed over 10 scientific research papers to gather insights relating to information theory and statistical mechanics.
* Collaborated with a team of researchers to analyze data and develop innovative computational models.

**Ericsson** January 2024 – May 2024

*Machine Learning Intern*

* Guided the development of machine learning algorithms tailored for the telematics domain, enhancing data-driven insights and predictive capabilities.
* Proficiently utilized programming languages including Python, Java, Prolog, and Gradle to architect robust and scalable solutions, optimizing performance and efficiency.
* Integrated automated workflow processes to streamline product deployment, for integration end to end.
* Presented at bi-weekly internal demos and stakeholder demos to demonstrate key functionalities in project.

**TECHNICAL SKILLS**

**Known Languages & Tools**

* Languages: Python, Java, JavaScript, Prolog
* Tools & Libraries: Git, Gitlab, Numpy, Pandas, Scikit-Learn, PyTorch, Tensorflow
* Web Development, HTML, CSS, React.Js

**PROJECTS AND RELEVANT COURSES**

**Knowledge Distillation on VAE (**[**https://github.com/vishnucanada/Knowledge-Distillation**](https://github.com/vishnucanada/Knowledge-Distillation)**)**

* Analysis of response-based knowledge distillation on variational auto encoders
* Demonstrated key improvements using on student model with such technique

**Minimax vs Reinforcement Learning (**[**https://github.com/vishnucanada/MiniMaxRL**](https://github.com/vishnucanada/MiniMaxRL)**)**

* Comparison of Minimax and Reinforcement learning in a solved game
* Concluded that Minimax algorithms will find solved solution in solved games outperforming RL models

**Personal Website (**[**https://vishnucanada.github.io/personal-website/**](https://vishnucanada.github.io/personal-website/)**)**

* Developed a personal website to host a portfolio and resume, demonstrating web development skills
* Created with the intention of demonstrating interest of personal projects outside of school.

**Relevant Courses**

Object-Orientated Programming, Web Programming, Data Analytics, Artificial Intelligence, Neural Networks, Cybersecurity

**SKILLS**

**Language Skills**: Fluent English, Fluent French