# SKANDA VAIDYANATH

#### First year Master's Student, Computer Science

@ svaidyan@stanford.edu

% skandavaidyanath.github.io

in skanda-vaidyanath

Skandavaidyanath

## **EDUCATION**

# M.S. Computer Science A.I. Track Stanford University

Sep 2021 - Present

• CGPA: 4.105

B.E. (Hons.) Computer Science with a Minor in Data Science

#### BITS Pilani, Hyderabad Campus

m June 2016 - May 2020

- Class valedictorian.
- CGPA: 9.93/10, Major CGPA (only CS courses): 10.00/10

## SELECT EXPERIENCE

## Graduate Researcher

### **Stanford University**

🛗 Sep 2021 - Present

Stanford, California

- · Advised by Prof. Stefano Ermon and Prof. Dorsa Sadigh
- Worked on developing self-supervised models for satellite images and language-conditioned imitation learning
- Working on multi-agent reinforcement learning
- Keywords: Self-supervised learning, reinforcement learning, robotics

#### Research Intern

#### Microsoft Research

m Dec 2020 - July 2021

Pangalore, India

- Advised by Dr. Sriram Rajamani
- Used program synthesis techniques to generate code from multi-modal user input using large language models like GPT-3
- Keywords: Program Synthesis, natural language processing

#### Research Intern

#### Max Planck Institute for Informatics

**May 2019 - May 2020** 

- Saarbrucken, Germany
- Advised by Dr. Andrew Yates and Dr. Paramita Mirza
- Worked on projects at the intersection of deep RL and information retrieval
- Keywords: Information retrieval, natural language processing, reinforcement learning

# Research Intern (IUSSTF-Viterbi programme) USC Institute for Creative Technologies

May 2019 - July 2019

- **♀** Los Angeles, USA
- Advised by Prof. Kallirroi Georgila and Prof. David Traum
- Worked on RL algorithms to control a swarm of drones that attempts to negotiate with and save civilians from a forest fire.
- Keywords: Reinforcement learning

## **AWARDS, HONORS**



BITS Hyderabad Merit Scholarship (for being in the top 1% of my graduating class every semester)



IUSSTF-Viterbi Scholar 2019 (one out of fifteen students chosen from India for the programme)



Max Planck Institute for Informatics 2019 Research Scholar Fellowship

### **PUBLICATIONS**

- Divyansh Garg<sup>\*</sup>, Skanda Vaidyanath<sup>\*</sup>, Kuno Kim, Jiaming Song, Stefano Ermon. LISA: Learning Interporetable Skill Abstractions from Language (under review) [pdf]
- Naman Jain, Skanda Vaidyanath, Arun Iyer, Nagarajan Natarajan, Suresh Parthasarathy, Sriram Rajamani, Rahul Sharma. Jigsaw: Large Language Models meet Program Synthesis. ICSE 2022, Pittsburgh [pdf]
- Skanda Vaidyanath, Kallirroi Georgila, David Traum. Using Reinforcement Learning to Manage Communications Between Humans and Artificial Agents in an Evacuation Scenario. Accepted at FLAIRS 2020 and presented at FLAIRS 2021, Florida. (Short Paper) [pdf][poster][slides]

## **ACTIVITIES, INTERESTS**

- Course Assistant, Artificial Intelligence: CS221 Spring 2021-22
- Course Assistant, Reinforcement Learning: CS234 Winter 2021-22
- Research With Impact, SGSI 2021, Stanford University [link]
- Leadership Labs, SGSI 2020, Stanford University [link]

## **SKILLS**

Python C/C++ SQL Java
Pytorch Tensorflow Git

# **COURSEWORK**

Meta-Learning

Probabilistic Graphical Models

Reinforcement Learning

**Computer Vision** 

Information Retrieval

NLP