

## Anand Jain

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<b>EDUCATION</b>	<b>University of Chicago</b> <i>B.S.</i> , Computer Science. <b>Santa Clara High School</b>	<b>Expected Jun, 2021</b> <b>2017</b>
<b>SKILLS</b>	<b>Languages</b> Python, Julia, C, Bash <b>Packages</b> PyTorch, Gym, TensorFlow $\geq v2$ , Sklearn, Pandas <b>Spoken Languages</b> English - Fluent, Hindi, Spanish, Chinese - Classroom	
<b>EXPERIENCE</b>	<b>Fermilab LSST Intern</b> •Researched the applications of neural differential equations to astronomy •Used the PLAsTiCC Astronomical Kaggle dataset to train a neural network to approximate the differential equation of different astronomical objects' light curves •Worked with peers and mentors to create a high level API for fast prototyping and ensemble training of neural networks for astronomy datasets, primarily in PyTorch <ul style="list-style-type: none"><li>• <b>Technology/Tools:</b> TorchDiffEq, DifferentialEquations.jl, PyTorch, TensorFlow, Matplotlib, Astropy</li></ul>	<b>Jun 24 - Aug 31</b>
<b>PROJECTS</b>	<b>Sips: Odds Tracking on GCP</b> •Built a python package that tracks sports statistics and odds •Learned about cloud deployment by spinning up free-tier VMs on GCP •Have collected over 1 GBs of live odds data from football, basketball and hockey •Long-Short Term Memory (LSTM) classifier for directional movement of moneyline <ul style="list-style-type: none"><li>• <b>Technology/Tools:</b> Python, Requests, Beautiful Soup, PyTorch</li><li>• <b>Link :</b> <a href="https://github.com/anandijain/sips">github.com/anandijain/sips</a></li></ul> <b>Gym-Sips: RL Gym Environment</b> •Created a set of custom reinforcement learning environments using the OpenAI Gym package for the output of Sips •Attempted to use a Deep-Q network to learn a state value function. •Goal: I'd like to update my envs to be compatible with TF-agents and run the different algorithms supported and see if the agent learns any better <ul style="list-style-type: none"><li>• <b>Technology/Tools:</b> Python, Gym, PyTorch</li><li>• <b>Link :</b> <a href="https://github.com/anandijain/gym-sips">github.com/anandijain/gym-sips</a></li></ul>	<b>Oct 2018 - Now</b>  <b>Feb 2019 - Now</b>
<b>COURSES</b>	•Algorithms •Discrete Math •Abstract Linear Algebra •Mathematical Logic •Inventing Interactive Devices •Electronics •Computer Systems	
<b>ACTIVITIES</b>	<b>UCQuantum</b> •Unofficial club applying to become an official RSO for UChicago undergrads interested in quantum computing •We have 50 facebook group members and roughly 15 active members •Initial meetings have been learning/teaching the basics: superposition, entanglement, quantum logic gates, unitary matrices, and superdense coding •We are planning to host talks, hackathons, and lab tours with faculty on campus	<b>Aug 2019 - Now</b>