Tirth Patel

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OBJECTIVE

Undergraduate student in Computer Science and Engineering looking for research internship and software developer positions.

CORE SKILLS

Python/Cython/C/C++/Julia, Git, Machine Learning, Data Science, Bayesian Statistics, Bayesian Machine Learning

EDUCATION

Nirma University Ahmedabad, Gujarat
B.Tech in Computer Science and Engineering CPI: 8.6/10 2018-2022

WORK EXPERIENCE

Core Developer of the SciPy Project GitHub
SciPy Organization August, 2021 – Present
- Contributed 20+ enhancement, bug-fix, and documentation patches to SciPy on GitHub since May 2020.
- Maintainer since March 2021 and Core Developer since August 2021
- The SciPy Project: https://github.com/scipy/scipy
- My Work: https://www.github.com/scipy/scipy/pulls/tirthasheshpatel

Google Summer of Code, 2020 GitHub
Student Developer, NumFOCUS June, 2020 – September, 2020
- Developed a higher level Gaussian Process API for the PyMC project.
- Commited ≈ 30 hours a week for 12 weeks.
- Project Link: https://summerofcode.withgoogle.com/projects/6135416450711552

PROJECT WORK

Adding new distributions to the scipy.stats module for 1.6.0 release *SciPy* May, 2020 – October, 2020
- Added the negative hypergeometric and multivariate hypergeometric distributions in the scipy.stats module.
- Negative hypergeometric distribution: https://github.com/scipy/scipy/pull/12170
- Multivariate hypergeometric distribution: https://github.com/scipy/scipy/pull/12839

Searching in AI *Artificial Intelligence, A Modern Approach* January, 2020 – February, 2020
- Created and explained animations for various search algorithms in Python. Published in Analytics Vidhya
- See Article: https://medium.com/analytics-vidhya/searching-in-ai-e05973068c8e
- GitHub Project: https://www.github.com/tirthasheshpatel/Searching-in-AI

Facial Composites *Bayesian Methods for Machine Learning* February, 2019 – June, 2019
- Developed a Variational Autoencoder to generate forensic faces.
- Used bayesian optimization for quick search of the victim.
- Google Colab: https://colab.research.google.com/drive/1bD19DmcVcvw5mJ7nf1Rq41_d87fy0Tcd?usp=sharing

ARTICLES

HandCrafting an Artificial Neural Network in pure NumPy *Towards Data Science, A Medium Publication*
- Link: https://towardsdatascience.com/handcrafting-an-artificial-neural-network-e0b663e88a53

ACHIEVEMENTS

Python Bronze Badge and 1500+ Reputation on Stack Overflow
- Profile: https://stackoverflow.com/users/10177420/tirth-patel