
Education

Rutgers University • Master of Science

AUG 2019 - (EXPECTED) MAY 2021, CAMDEN NJ

Studying Computer Science with a concentration in Scientific Computing at **Rutgers University – Camden**.

GPA: 4.0

University of Pune • Bachelor of Engineering

JUN 2013 - JUL 2017, INDIA

Studied Computer Science & Engineering at the **Army Institute of Technology**.

Graduated with a first class with distinction.

Experience

Senator Walter Rand Institute for Public Affairs •

Graduate Research Assistant

NOV 2019 - PRESENT, CAMDEN

- Designing probabilistic model(s) for generating actionable insights into community health outcomes data.
- Assessing shortfalls in the South Jersey healthcare system during the COVID-19 pandemic using a combination of epidemiological modeling and optimal control. ^[1]
- Coordinating efforts and maintaining the codebase for a study on the mortality risks during and following COVID-19.

Rutgers University • Research Assistant (Summer)

MAY 2020 - PRESENT, CAMDEN

Researching stochastic algorithms for self-organizing particle systems model of distributed computing.

ParallelDots, Inc. • Associate Data Scientist

JUL 2018 - JUL 2019, GURGAON

- Wrote predictive models for market research using Bayesian machine learning.
- Worked on transfer learning in language modeling and memory efficient deep learning.

Indian Institute of Technology, Delhi • Research Intern

AUG 2017 - MAY 2018, NEW DELHI

Studied the generalisation properties of deep neural networks, co-wrote a study paper and assisted with one academic paper.

Edelweiss Financial Services • Data Science Intern

JUN 2016 - JUL 2016, MUMBAI

Designed and developed a model to predict propensity of claims in new insurance policies for the Risk Analytics team at *Edelweiss-Tokio Life Insurance*. Model achieved an AUC of 0.89 on a dataset with extreme class imbalance.

Research

Timing County Hospital Bed Shortfall during COVID-19 ^[2]

Reports: Senator Walter Rand Institute for Public Affairs

Regional Health System Shortfalls with a Novel COVID-19 Model ^{[3][4]}

Reports: Senator Walter Rand Institute for Public Affairs

Effects of regularization on model complexities of neural networks ^[5]

M. Sharma, A. Yadav, S. Soman, Jayadeva
arXiv:1901.11458

Camera2Caption: A Real-Time Image Caption Generator ^[6]

P. Mathur, A. Gill, A. Yadav, A. Mishra, N.K. Bansode
IEEE International Conference on Computational Intelligence in Data Science (ICCIDS 2017)

Project Highlights

Pymobots: Stochastic Algorithms simulator for the Amoebot Model

PYTHON, DJANGO, JAVASCRIPT

FitFast: Quickly fine-tune language models for your downstream NLP tasks ^[7]

PYTHON, PYTORCH

Retrogram: Retrofitted (domain-adapted) word vectors with Word2Vec skip-gram model ^[8]

PYTHON, TENSORFLOW

Camera2Caption: A Real-time Image Caption Generator ^[9]

PYTHON, TENSORFLOW

[\[more\]](#)

Outreach & Miscellanea

The Carpentries • Instructor

APR 2020 - PRESENT

Center for Learning and Student Success • Tutor

NOV 2019 - JAN 2020

Teach for India • Education Volunteer

JUL 2017 - SEP 2017