

---

## 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** •

Research Project 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 epidemiological modeling techniques.<sup>[1]</sup>

### **ParallelDots, Inc.** • Associate Data Scientist

*JUL 2018 - JUL 2019, GURGAON*

Researched and developed state-of-the-art text and natural language solutions for the ParallelDots AI API. Worked on problems in domain adaptation and transfer learning techniques in NLP, and on Bayesian machine 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<sup>[2]</sup>

Reports: Senator Walter Rand Institute for Public Affairs

### Regional Health System Shortfalls with a Novel COVID-19 Model<sup>[3][4]</sup>

Reports: Senator Walter Rand Institute for Public Affairs

### Effects of regularization on model complexities of neural networks<sup>[5]</sup>

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

### Camera2Caption: A Real-Time Image Caption Generator<sup>[6]</sup>

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

---

## Project Highlights

---

### FitFast: Quickly fine-tune language models for your downstream NLP tasks<sup>[7]</sup>

AUG 2018 - NOV 2018

### Retrogram: Retrofitted (domain-adapted) word vectors with Word2Vec skip-gram model<sup>[8]</sup>

OCT 2018

### Camera2Caption: A Real-time Image Caption Generator<sup>[9]</sup>

NOV 2016 - MAY 2017

[\[more\]](#)

---

## Outreach & Miscellanea

---

### Center for Learning and Student Success • Tutor

NOV 2019 - JAN 2019, CAMDEN

Providing course specific tutoring in Statistics, Calculus and Computer Science to undergraduate students at Rutgers University – Camden.

### Teach for India • Education Volunteer

JUL 2017 - SEP 2017, NEW DELHI

Designed and taught a Computer Literacy course to standard 8th and 9th students in Jahangirpuri area, North Delhi.