

# ROHAN JAGTAP

Location: Mumbai, India | Contact: +91-7208435227 | Email: rohanj30@icloud.com | Portfolio: rojagtap.github.io  
GitHub: github.com/rojagtap | LinkedIn: linkedin.com/in/rojagtap | Blog: medium.com/@rojagtap

## EDUCATION

- B.E. Computer Engineering: Sardar Patel Institute of Technology** 2020, Mumbai, India
- **CGPA:** 8.73 / 10
- Class XII, HSC: Kishinchand Chellaram College** 2016, Mumbai, India
- **Score:** 84.31 %
- Class X, SSC: St. Teresa's High School** 2014, Mumbai, India
- **Score:** 90.40 %

## PUBLICATIONS

- Healthcare Conversational Chatbot for Medical Diagnosis (Book Chapter)** October 2020
- Proposed a modification to the Hierarchical Recurrent Encoder-Decoder(HRED) architecture for diagnostic chatbots.
  - HRED is responsible for retaining short-term context in conversations.
  - Jagtap. et. al. (2020). Healthcare Conversational Chatbot for Medical Diagnosis. In Patil, B., & Vohra, M. *Handbook of Research on Engineering, Business, and Healthcare Applications of Data Science and Analytics*. IGI Global. <http://doi:10.4018/978-1-7998-3053-5>. **Webpage:** [igi-global.com/book/handbook-research-engineering-business-healthcare/239914](http://igi-global.com/book/handbook-research-engineering-business-healthcare/239914)
- An In-depth Walkthrough on Evolution of Neural Machine Translation** April 2020
- Extensively studied the past as well as the recent trends in Neural Machine Translation.
  - Put forth a comprehensive comparison of the state of the art models in NMT.
  - R. Jagtap and D. S. N. Dhage, "An In-depth Walkthrough on Evolution of Neural Machine Translation," arXiv e-prints, p. arXiv:2004.04902, Apr. 2020. **Paper Link:** [arxiv.org/abs/2004.04902](https://arxiv.org/abs/2004.04902)

## WORK EXPERIENCE

- Member of Technical Staff at VMware Inc.** Bengaluru, India  
**Full Time** July 2020 - Present
- Contributing to the development of microservices that collaborate with Microsoft Azure Cloud Services and other VMware Horizon Cloud Services using Spring Boot.
  - Actively working on a data analytics project to handle and analyze customer data.
  - Actively participating in customer escalations to provide bug fixes.
  - Serving on the interview panel for hiring.
  - Worked on revamping the entire automation framework for the said product- App Volumes for VMware Horizon Cloud on Microsoft Azure. Wrote 25 tests so far.
  - Contributed to DevOps by setting up pipelines, migrating them, integrating security tools, writing shell scripts, etc.
- Intern** January 2020 - July 2020
- Built a Notification Microservice using Spring Boot and Spring Data MongoDB as ORM.
  - Developed a Database Migration Tool in Ruby for a cross-platform feature migration.
- Web Developer at Online Manufacturing** Mumbai, India  
**Intern** February 2019 - March 2019
- Developed a website for vaish club- to connect members of the vaish community and provide them an interface to maintain business relations by posting requirements and getting them fulfilled from other businesses registered on the website. Used the Django Framework.
- Web Developer at Sardar Patel Technology Business Incubator** Mumbai, India  
**Intern** December 2018 - January 2019
- Developed a Job/Internship Application Portal to facilitate job posting and hiring for the firm. Used the Django Framework.
  - **Website Link:** <https://careers.spit.ac.in>

## TECHNICAL SKILLS

- **Programming Languages:** Python, Java, Ruby, C, C++
- **AI:** Deep Learning, Natural Language Processing, Machine Learning, Reinforcement Learning
- **Frameworks:** Django, Spring Boot, Flask
- **Databases:** MySQL, MongoDB,
- **Web Development:** HTML, CSS, Bootstrap, JavaScript

## CERTIFICATIONS

---

### TensorFlow Developer Certificate

June 2020 - June 2023

- **Credential Link:** [credential.net/c53be2df-3dao-40d1-83f6-d6627faoed8b](https://credential.net/c53be2df-3dao-40d1-83f6-d6627faoed8b)

### NPTEL: Reinforcement Learning

October 2019

- **Score:** 77/100 (Rank #2 in India. [Link](#))
- **Certificate Link:** [nptel.ac.in/noc/Ecertificate/?q=NPTEL19CS55S41820719191052649](https://nptel.ac.in/noc/Ecertificate/?q=NPTEL19CS55S41820719191052649)

## ACHIEVEMENTS

---

### Winner, Technical Paper Presentation Competition - SPIT, Mumbai

November 2019

- Departmental Technical Paper Presentation Competition Organized by the Research and Development Department of Sardar Patel Institute of Technology.
- Final year students were required to present their final year project papers to a jury that consisted of internal faculty as well as guest researchers.

### Runner Up, Sangam - ML Hackathon By IIT Madras Alumni Association

August 2019

- **Problem Statement:** To derive the Air Quality Index (AQI) and gain insights from the collected data; predict AQI in temporal as well as spatial dimensions with visualizations.
- Worked in a team of 2; preprocessed the data and trained two autoregressive models for spatial and temporal predictions.
- **Github:** [github.com/rojagtap/sangam2019](https://github.com/rojagtap/sangam2019)

### Winner, Smart India Hackathon, 2019 Software Edition

March 2019

- **Problem Statement:** Leveraging Technology to Improve Customer Experience i.e. to make insurance documents more comprehensive to the people, by Future Generali Insurance.
- **Solution:** An Extractive Text Summarizer.
- Worked in a team of 6; implemented the core summarizer logic in Python using NLTK.
- **Github:** [github.com/rojagtap/voice-over-insurance-protocol](https://github.com/rojagtap/voice-over-insurance-protocol)

## PROJECTS

---

### Abstractive Text Summarizer (Transformer)

May 2020

- Trained a model that summarizes paragraphs of text into 1-2 liners; hence, summarizing news articles.
- Implemented the Transformer architecture from the paper, "Attention is all you need"
- **Github:** [github.com/rojagtap/abstractive\\_summarizer](https://github.com/rojagtap/abstractive_summarizer) (**100 Stars**)
- **Blog (Theory):** [towardsdatascience.com/transformers-explained-65454cof3fa7](https://towardsdatascience.com/transformers-explained-65454cof3fa7)
- **Blog (Implementation):** [medium.com/swlh/abstractive-text-summarization-using-transformers-3e774cc42453](https://medium.com/swlh/abstractive-text-summarization-using-transformers-3e774cc42453)

### Wireframe to Picture Generator (pix2pix)

March 2020

- Trained a model that generates completed images from wireframes (e.g. generating face images from landmarks).
- Implemented the pix2pix model as suggested in the paper "Image-to-Image Translation with Conditional Adversarial Networks"
- **Github:** [github.com/rojagtap/pix2pix](https://github.com/rojagtap/pix2pix)

### Random Image Generator (DCGAN)

March 2020

- Trained a model to generate images from a particular distribution from a junk distribution.
- Implemented DCGANs as proposed in "Unsupervised Representation Learning with Deep Convolutional Generative Adversarial Networks".
- **Github:** [github.com/rojagtap/DCGAN](https://github.com/rojagtap/DCGAN)
- **Blog (GANs):** [towardsdatascience.com/a-comprehensive-guide-to-generative-adversarial-networks-gans-fcfe65d1cfe4](https://towardsdatascience.com/a-comprehensive-guide-to-generative-adversarial-networks-gans-fcfe65d1cfe4)
- **Blog (DCGAN):** [towardsdatascience.com/implementing-deep-convolutional-generative-adversarial-networks-dcgan-573df2b63cod](https://towardsdatascience.com/implementing-deep-convolutional-generative-adversarial-networks-dcgan-573df2b63cod)

### Text Generator (Autoregressive Language Model)

February 2020

- Trained an RNN-based Language Model to learn patterns in a given text corpus.
- **Github: (TensorFlow):** [github.com/rojagtap/eminem\\_lyrics\\_generator](https://github.com/rojagtap/eminem_lyrics_generator)
- **Github (NumPy from Scratch):** [github.com/rojagtap/text\\_predictor\\_using\\_rnn](https://github.com/rojagtap/text_predictor_using_rnn)
- **Blog:** [towardsdatascience.com/generating-eminem-lyrics-using-neural-networks-96e7f9c45e8a](https://towardsdatascience.com/generating-eminem-lyrics-using-neural-networks-96e7f9c45e8a)