

# Narendiran Chembu

Data Scientist (starting September 2020)

# Links



Portfolio website



Gmail



<u>Github</u>



<u> inkedIn</u>



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#### **Skills**

Python

C++

PyTorch TensorFlow

Pandas

SQL

**Apache Spark** 

ROS

Git

Tableau

# **Hobbies**

Hitchhiking and playing the ukulele

#### **Profile**

Passionate coder with a strong foundation in probability theory, statistics and linear algebra. Proficient in developing deep learning models and adept with big data processing, thereby creating valuable insights and industry relevant tools such as predictive models and recognition systems

#### Education

2018-2020

University of Amsterdam (UvA) | The Netherlands

Master of Science in Artificial Intelligence

- GPA: 8.27/10 (thesis grade to be included)

2013-2017

Indian Institute of Technology Madras (IITM) | India

(Ranked No.1 engineering institute of India by the Ministry of HRD, India since 2015) Bachelor of Technology in **Mechanical Engineering** (minor: **Industrial Engineering**)

- GPA: 8.78/10
- Cracked one of the most competitive of engineering entrance exams: JEE (2% acceptance)

# **Work Experience**

Nov' 2019 8 months **ZyLAB** (An e-discovery firm for legal and Govt. orgs) | The Netherlands **Data Science Research Intern** 

- Extensively studied the unsupervised cross-domain adaptation of a pre-trained language model (BERT) for entity recognition (from CONLL newswire to Enron email domain)
- Achieved a 3.2 F1 score improvement over the baseline BERT model

Jun' 2019 2 months **CtCue** (An Information retrieval startup for healthcare industry) | The Netherlands **Machine Learning Intern** 

- Built a generative autoencoder (seq2seq LSTM) tool for synthesizing Electronic Health Records (EHR), used in testing the query pipeline system
- Tackled the problem of realistic discrete-sequential data generation by custom training word2vec embeddings and created tunable results by incorporating tempered-softmax

Mar' 2019 3 months UvA - Course: Image Processing, Bachelors AI | The Netherlands

**Teaching Assistant** 

- Assisted in programming assignment creation and evaluation in MATLAB
- Provided personal guidance with facetime of 8 hrs/week for the students

Aug' 2017 10 months IITM - Embodied Cognition | India

Project Associate (sponsored by the Defense Research Development Organisation India)

- Solely fabricated the perception guided grasping pipeline on the Moveit! stack of ROS as an atomic task, to build the behavior repertoire of the robot with a gripping arm

## **Projects**

Sep' 2016 11 months **Center For Innovation** (A student run innovation organisation in IITM) | India **Software Team, Abhiyaan** 

Institute robotics team to compete in Intelligent Ground Vehicle Competition - IGVC 2017

- Implemented the navigation stack: localisation through sensor fusion by Extended Kalman Filter (EKF), enabling obstacle-avoiding GPS waypoint navigation
- Designed and simulated the robot in Gazebo to test SLAM and lane-detection algorithms

May' 2016 3 months National Chemical Laboratory (NCL Pune) | India

Research Internship (co-authored Journal paper published in Soft Matter - 2017)

- Simulated a Monte-Carlo Brownian dynamics to estimate the number of cubosomes (lipid nano-particles) adsorbed and corroborated with experimental droplet retraction times

## **Volunteering and Awards**

- **Avanti, NGO** (2013-2014): Mentored 50+ underprivileged students at Jawahar Navodaya, Pondicherry (11th grade) focussed on cracking Joint Entrance Examination and on overall academic excellence
- Awarded the coveted **INSPIRE award** (Innovation in Science Pursuit for Inspired Research) consecutively for two years 2009 and 2010 by the Department of Science and Technology, India