

Nachiket Naganure

nachiketun8@gmail.com • +91 9404350026 • github.com/NachiketUN • linkedin.com/in/nachiketnaganure/ • [Personal Website](#)

EDUCATION	National Institute of Technology Karnataka (NITK), Surathkal Jul 2016 – Sep 2020 <ul style="list-style-type: none">▪ B.Tech. in InformationTechnology.▪ CGPA: 8.29▪ <i>Relevant Coures:</i> Soft Computing, Information Retrieval, Design and Analysis of Algorithms and Data Structures, Stanford NLP MOOC, Deep Learning(Coursera Specialization), Object Oriented Analysis.
EXPERIENCE	Software Engineer (SDE 2), VISA Inc. Oct 2020 – Present <ul style="list-style-type: none">▪ Part of VISA Direct Team, working on high throughput, highly scalable distributed payment systems.▪ Worked on CrossBorder India and Canada Payment Flows with Spring Batch, Spring Boot and Apache Kafka Tech Stack.▪ Developed and delivered a Spring Batch based component for Goldman Sachs. Software & Machine Learning Intern, JP MORGAN CHASE & CO May 2019 – Jul 2019 <ul style="list-style-type: none">▪ Designed and developed an Intelligent ChatBot for the DevOps team at Core Engineering Services Division, JPMC.▪ Built a 6-layer Deep Neural Net Architecture with Keras for intent classification and decision making unit of the ChatBot.▪ Used Django and JavaScript for the chat interface and presented the project to VP of the team I worked for. iOS App Development, Savemonk Oct 2017 – Feb 2018 <ul style="list-style-type: none">▪ Developed an iOS App using React Native Framework coupled with REDUX library.▪ App is capable of generating cashbacks for various ecommerce websites. Fetches data from the server to display multiple coupons and simulates virtual wallet for users. Backend Developer, NITK Main Website Jul 2018 – Oct 2018 <ul style="list-style-type: none">▪ Contributed in Backend work of the upcoming new website for the Institute. Used Laravel Framework and MySQL Database in the project.
PUBLICATIONS	Leveraging Deep Learning Approaches for Patient Case Similarity Evaluation [Publication Link] <ul style="list-style-type: none">▪ Presented at Frontiers of Intelligent Computing: Theory and Applications (FICTA 2020).▪ Won the best papers award at the conference and the work is published in Springer LNCS Proceedings. Best Papers FICTA 2020 Link BEV Detection and Localisation using Semantic Segmentation in Autonomous Car Driving Systems [Publication Link] <ul style="list-style-type: none">▪ Presented at the 7th Edition International Conference on Electronics, Computing and Communication Technologies, CONECCT, a flagship conference of the IEEE Bangalore Section, India. Published in the IEEE Explore Conference proceedings.
SELECTED PROJECTS	<ul style="list-style-type: none">▪ Measuring Patient Case Similarity [Github Link]<ul style="list-style-type: none">• Used NLP and Machine Learning technique on largest EHR Data (MIMIC-III Dataset, 20,000 patients) to find similar patient cases and predict similarity scores.• Glove Vectors were used as word embeddings and Keras to code the deep learning model.• Custom model (involving CNNs and GRUs) learns by passing through the records of a patient chronologically and achieved an accuracy of 93.62%• This project resulted in a research paper listed in above section.▪ Large Integer Factorisation [Github Link]<ul style="list-style-type: none">• Implemented Quadratic Sieve Algorithm in Python.Algorithm was able factorize numbers upto 15 digits.• Used Pollard Rho Algorithm to factorize smaller numbers.• Analyzed variation of Sieve size with time taken to factorize.▪ Pneumonia Detection on Chest X-Rays with Deep Learning<ul style="list-style-type: none">• Implemented various Convolutional neural network models to detect Pneumonia in Chest X-Rays.

- Analyzed affect of different approaches of pre-processing on the overall accuracy of the model. Image Processing using OpenCV to remove text from the X-Rays and to enhance contrast using Dark Channel Prior to improve overall efficiency of the model.

▪ **Phonetic Algorithm for Hindi Language** [\[Github Link\]](#)

- Developed and implemented a Phonetic Algorithm for Hindi Language using Java. Inspired by the Soundex Algorithm, it was developed for the Samsung Appathon held at NITK.
- Secured 5th place in the Appathon.

▪ **ReCell** [\[Github Link\]](#)

- Online Portal for buying and selling used goods. Sellers can put up goods which will be visible to the buyers based on location. Developed using Django and MySQL as the database.
- Implemented a simple recommendation system for the users.

▪ **Health Care Management App** [\[Github Link\]](#)

- Developed an Android App where in patients can book appointments with various doctors depending on schedule and automated system for lab works, prescription etc.
- Used Firebase DB to maintain the calendar and personal data.

▪ **Detecting Duplicate Questions in Online Forums**

- Used Quora Dataset to train various models to predict duplicate questions.
- Trained our own word embedding using gensim library and evaluated different models performance on the test dataset.

TECHNICAL SKILLS

- **Languages/MarkupandScripts** - C, C++, Java, Python, JavaScript, HTML, CSS, Bash.
- **Tools/Frameworks** - Git, STL, Django, Laravel,React Native, Spring Framework, Apache Kafka.
- **Libraries** - PyTorch, Keras.

ACHIEVEMENTS

- Secured *All India Rank 5218* in JEE Advanced(IITs) 2016 among 150,000 candidates.
- Secured *99.98 percentile* in JEE Main(NITs) 2016 among 1.3 million students.

EXTRA CURRICULAR ACTIVITIES

- Mentor at Avanti Fellows Club. Volunteer tutoring and guidance in Physics and Math subjects of JEE Entrance Exam for JNV Mudipu students.
- Volunteer Developer at iCART India.Contributing in data gathering and data analysis/visualisation for Covid-19 insights at covidtoday.in
- Production Member for the Drama Series *In a Nutshell* in the Literary Stage and Drama Club.

[CV compiled on 2021-12-08]