

# Nachiket Naganure

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## EDUCATION

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### Texas A&M University

College Station, Texas

Master of Science in Computer Science **GPA: 4.00/4.00**

Jan 2023 – Dec 2024

- Relevant Coursework: Analysis of Algorithms, Distributed Processing Systems, Operating Systems, Deep Learning

### National Institute of Technology Karnataka

Surathkal, India

Bachelor of Technology in Information Technology **GPA: 8.29/10**

Jun 2016 - May 2020

## EXPERIENCE

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### Visa Inc — Software Engineer (SDE 2)

Oct 2020 – Jun 2022

- Managed a team of two developers and one test engineer to enhance Cross-Border India and Canada Payment Flows, focusing on data engineering using Spring Batch and Spring Boot technologies
- Spearheaded a data engineering solution by developing a Spring Batch-based transaction compliance reporting system tailored for Goldman Sachs in coordination with teams from Singapore and Austin
- Designed and prototyped a high-performance transaction ingestion system utilizing Apache Kafka, and conducted extensive stress testing with Apache JMeter to validate its capability to handle up to 10,000 transactions per second, ensuring robust data throughput
- Overhauled automation application intended for integration testing of new feature additions to existing tech stack using TestNg and Jenkins. Reduced overall run-time by around 20%

### JP Morgan Chase — Software Development Intern

May 2019 – Jul 2019

- Designed and constructed an Intelligent ChatBot for the DevOPs team at Core Engineering Services Division, JPMC
- Architected a 6-layer Neural Network with Keras for intent classification and decision making unit of the ChatBot resulting a accuracy of 97% on curated devops queries

### Savemonk — iOS App Development Intern

Oct 2017 – Feb 2018

- Constructed an iOS App leveraging React Native with ability to fetch coupon data from cloud

## PUBLICATIONS

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### Leveraging Deep Learning Approaches for Patient Case Similarity Evaluation

[[Publication Link](#)]

- Using NLP techniques designed and trained a model on largest EHR Dataset (MIMIC-III) to find patient similarity scores using custom scoring function with accuracy of 93.62%. Won Best Paper Award at FICTA 2020 [[Award Link](#)]

### BEV Detection and Localisation using Semantic Segmentation in Autonomous Cars [[Publication Link](#)]

- Presented at the 7th Edition CONECCT, IEEE Bangalore Section, India. Published in the IEEE Explore proceedings

## TECHNICAL SKILLS

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**Programming:** C, C++, Java, Python, JavaScript, Bash/Shell, Ruby

**Tools:** Git, Docker, Apache Kafka, Elasticsearch, Tensorflow, Keras, Pytorch, Scikit-learn, XGBoost, JIRA, Jenkins, Confluence, Spring Batch, AWS, GRPC

**Web Technologies:** MySQL, NOSQL, Django, MongoDB, React, REST, Ajax, Spring Boot, Rails, XML

## SELECTED PROJECTS

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### Operating System Simulator using x86 Bochs Emulator

- Coded kernel features in C++, such as memory manager, page replacement algorithms, process scheduler, unix like file system and tested it with Bochs Emulator for x86

### Distributed Fault Tolerant Social Network Service with Zookeeper like Coordinator

- Designed a scalable and distributed architecture for a social network similar to Twitter, utilizing GRPC and C++.
- Engineered a Zookeeper-like coordinator for data replication and synchronization among servers, along with heartbeat services for fault tolerance
- Devised server and client services to accommodate follow and blog/tweet posting functionality

### Large Integer Factorisation | [[Project Link](#)]

- Implemented Quadratic Sieve Algorithm in Python with ability to factorize numbers up to 15 digits

### ReCell | [[Project Link](#)]

- Created an e-commerce platform for used goods using Django and MySQL, accompanied by a personalized recommendation system based user shopping history

### Health Care Management App | [[Project Link](#)]

- Developed an Android App facilitating patient-doctor appointment bookings, incorporating an automated system for lab works and prescriptions
- Integrated Firebase DB to manage calendars and personal data seamlessly