# Vasu Naman Verma

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#### **EDUCATION**

Texas A&M University, College Station, Texas

Aug 2022 - May 2024

Master of Computer Science - GPA: 3.9/4.0

Thapar Institute of Engineering and Technology, Patiala, India

Aug 2016 – July 2020

Bachelor of Engineering in Electronics and Computer - GPA: 9.6/10.0

**Relevant Coursework:** Software Engineering, Analysis of Algorithms, Algorithms for Big Data, Artificial Intelligence, Deep Learning, Data Mining and Analysis, Operating Systems, Distributed Systems, Quantum Algorithms, Randomized Algorithms

## SKILLS AND CERTIFICATIONS

Languages: C++, Java, Python, JavaScript, SQL (Postgres, MySQL), NoSQL (MongoDB), HTML/CSS Frameworks: Django, Spring Boot, React, Ruby on Rails, Node.js, Flask, Tensorflow, Keras, Chakra UI

Tools: AWS (EC2, Lambda, S3, SQS), REST, SOAP, Git, Docker, Kubernetes, Jenkins, Maven

**Certifications**: AWS Certified Cloud Practitioner

#### **EXPERIENCE**

**Amdocs** Sept 2020 – July 2022

Software Engineer

- Directed 3 iterative phases of client data collection by scripting the transfer of data from large Excel sheets to databases, configuring global system variables.
- Collaborated with the Ordering Team to create a 5-step interface that performed credit checks, allowed device and cellular plan selection, and facilitated loan setup with down payment options
- Developed logic for payment processing leveraging 3rd party processors, enabling support for credit card and EMI options.
- Reduced technician wait times by 40% by implementing an Appointment Booking System to optimize resource allocation.
- Unified 3 systems into one platform, enabling support staff to troubleshoot all customer network devices from a single interface.
- Headed the development of new features for the CRM system, contributing to 25% of quarterly product enhancements.
- Crafted robust APIs and intuitive user interfaces in JAVA, streamlining the process of customer support case management.
- Provided on-call support to rectify defects in production releases, leading to a 15% reduction in customer-reported issues.
- Devised and executed Database Schema to support iterative enhancements and ensure data integrity.

**OYO** Jan 2020 – June 2020

Software Engineer Intern

- Built a user-friendly Menu-Driven Interface used by 3+ teams for SQL query creation, storage, and distribution on Hive.
- Automated customer onboarding with an Excel parser, cutting onboarding team's time by 50%.
- Constructed Health Status Indicator for Invoice Team microservices, improving monitoring and issue resolution.
- Wrote API logic for the Invoice and Taxation Team using Ruby On Rails.

### **PROJECTS**

- AudioBid: Engineered a Django-based web platform for voice transcription jobs, featuring dynamic pricing, seamless user communication via a chat system, and multiple audio upload options. Incorporated advanced functionalities like Google OAuth for authentication and AWS SES for email services, hosted on Heroku with PostgreSQL and AWS S3 integration.
- **Neural Sequence Translator:** Developed a Transformer-based model that translates random character sequences with 97.5% accuracy, trained on 112,000 input sequences. Employed advanced techniques such as multi-head attention, positional encoding, and custom text vectorization using TensorFlow and Keras frameworks.
- **Distributed Graph Matching:** Developed a distributed system for graph matching, simulating machines with a 2D array to distribute edges and calculate parallel processing latency. Implemented a distributed maximal matching algorithm with probabilistic stopping conditions and analyzed its performance. Compared latency and edge count between distributed and single-machine approaches, highlighting efficiency trade-offs.
- Smart Air Purifier: Designed an affordable smart air purifier controlled via web application, utilizing C++, Arduino, AWS IoT, JavaScript, and HTML/CSS. It features automatic activation based on dust levels and employs HEPA H13 and activated carbon filters for effective indoor air purification.

## **HONORS**

• Merit Scholarship Recipient: Thapar Institute of Engineering and Technology (2016 - 2020, Top 5% of class)