

Sanket Sapkal

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🎓 EDUCATION

- **University of Southern California** Los Angeles, CA
Master of Science in Computer Science August 2021 - May 2023
- **Pune Institute of Computer Technology** Pune, India
Bachelor of Engineering in Computer Engineering; GPA: 3.62 (72.5%) July 2013 - July 2017

💼 EXPERIENCE

- **Cursor Insight Ltd.** London, UK
Software Developer (Remote) July 2019 - July 2021
 - Product: Signowise, a biometric electronic signature and document handling system.
 - Developed a **distributed and concurrent event dispatching** feature for the synchronization subsystem.
 - Designed and implemented **Incremental Updates** feature in the synchronization subsystem and workflow engine to optimize the write operations, thereby **improving the write performance by 50%**.
 - Implemented a **Conflict Resolution framework** for the synchronization subsystem to resolve conflicts.
 - Designed and implemented a Document Transfer framework, which facilitates handover of electronic document from one client to another across geographical location.
 - *Technologies: Erlang, Cowboy, React, SQL, Avro*
- **Veritas Technologies LLC** Pune, India
Associate Software Engineer July 2017 - July 2019
 - Product: Veritas Cognitive Object Storage, a distributed object storage based on DynamoDB paper.
 - Developed **Object versioning** and **WORM** features, which improved the fault tolerance of the product.
 - **Enhanced product ingest performance by 400% and read performance by 200%** by developing a queuing framework which ensures the spatial locality of related data.
 - **Enhanced product scale out performance** by solving the data rebalancing problem, effectively **reducing the data rebalance to 10% of the earlier number**, giving VCOS an edge over the competitors.
 - **Designed and implemented data-chunking and distributed garbage collection frameworks** for efficient handling of large objects.
 - Added **TLSv1.3, OAuth 2.0, 2FA, KMIP support in the product for enhanced security**.
 - Added IPv6 support to the product for Public Sector Compliance.
 - **Successfully demoed Kafka, IoT, Video Streaming applications with VCOS** in Veritas tech fairs as well as in customer engagements.
 - *Technologies: Elixir, Erlang, Riak Core, RocksDB, LMDB, Phoenix, Angular.js.*

🚀 PROJECTS

- **SeeFruit**
 - Android App which uses Deep Learning(CNNs) to identify a fruit and provide nutritional info when an android phone camera is pointed at it.
 - Stripped and retrained inception v3 model to generate a custom model for fruits, with accuracy of 85%.
 - *Technologies: Android, Tensorflow*
- **Smart Chatbot**
 - Python webapp which uses Deep Learning(LSTMs) to answer to human queries. It can be used to reduce human effort in replying to messages and emails while interacting with customers.
 - Neural Network architecture: standard encoder/decoder with 2 LSTM layers (hidden size 256).
 - *Technologies: Android, NLTK, Tensorflow*
- **Food Map**
 - Web app which enables users to list/save favourite restaurants on a personal real time Google Map with custom markers for different types of restaurants.
 - *Technologies : MEAN stack, Google Maps web API*

⚡ TECHNICAL SKILLS

- **Languages:** C++, Elixir, Erlang, Java, Javascript, Python.
- **Frameworks:** Android, CUDA, J2EE, MEAN stack, Phoenix, Riak Core, Tensorflow.
- **Databases:** LMDB, MongoDB, MySQL, RocksDB.