

Sanket Sapkal

✉ sapkal@usc.edu | ☎ +91-9673864990 | 🏠 sanketsapkal.com | in [linkedin.com/in/sanket-sapkal](https://www.linkedin.com/in/sanket-sapkal)

🎓 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 - Present*
 - 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: AVRO, Cowboy, Erlang, MSSQL, React.
- **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: Angular.js, Elixir, Erlang, Phoenix, Riak Core, RocksDB, LMDB.

🚀 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).
- **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.