Aman Lonare

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PROFESSIONAL EXPERIENCE

Hitachi R&D, Center for Technology Innovation   **Tokyo, JPN**
Research Software Engineering, Services Computing Research Dept.   *Jan 2021 – Present*

- Developing a **Distributed Data Management Framework** for the microservice architecture of mission-critical systems
- **Proposed and developed a PoC** of a highly available, performant, and idempotent CQRS and ES implementation
- The performance of the implementation outperformed the competitor's by reducing the latency by ~10% & improved availability
- Integrating the proposed architecture in Hitachi's indigenous framework for **microservices application development**

Patent: "System and method to assist the modelling of CQRS and Event Sourcing based application", *Submitted for Acceptance*

Indian Institute of Technology Bombay   **Mumbai, IND**
Project Research Associate, Technology & Development   *Sept 2020 – Nov 2020*

- Developed models for detecting onions infection using **YOLOv3** and different **sensors data** with an overall **accuracy of 95%**
- Early detection reduced the **food spoilage by 20%** and increased **farmers revenue by 10%** using **Computer Vision** techniques
- Formulated a two year curriculum for a nationwide course on "Digital Technology **(Robotics)** for Smart Agriculture" by ICAR

Home Equity Private Limited, WhatsLoan   **Bangalore, IND**
Software Developer Intern   *May 2016 – July 2016*

- Developed **functional prototypes** for Android application of the organization which includes Login, and Registration screens
- **Enabled data visualization** of the user characteristics by integrating the **Google Analytics** for **optimizing the user acquisition**

PROJECTS

Web-based Decision Support System (DSS) for Crop Monitoring   *Aug 2019 – July 2020*

- Developed a **web portal** for farmers, government, and sugarcane mills for **real-time crop monitoring** using remote sensing
- Achieved an **accuracy of 78%** and **F1-score of 0.8** in predicting crop yields with **CNN** using open source satellite images
- Achieved an **accuracy of 72.74%** in predicting the yield of Sugarcane crop 3 months before the harvesting using regression
- Reported the increase in the MSP of sugarcane **by 15%** from improved supply chain and reduced spoilage by using the portal
- **Publication:** Lonare, A., Maheshwari, B., Chinnasamy, P. (2022). Village Level Identification of Sugarcane Crop in Sangali, Maharashtra, India, using Open Source Satellite Images. https://doi.org/10.54386/jam.v24i3.1688

SKILLS

Programming Languages:	Python, Java, SQL, HTML5, CSS3
Data Science & Technologies:	A/B testing, ETL, Data Science Pipeline, Keras, Tensorflow, PyCharm, Docker, Kubernetes, AWS, Git, Flask, Axon Framework, Spring Boot, Microservices, DevOps, OSS

LEADERSHIP & AWARDS

- **Publication:** Lonare, A., Srivastava, A., Chinnasamy, P. (2019). Study of LULC Change in Academic Campus by Analyzing Rainfall-Runoff Process for Sustainable Design. [Conference Paper].
- **Winner of the TECHNO-VISION 2018**, a National Level Technical Paper Presentation organized under TEQIP-III, India
- Core member of **Data Analytics and Visualization Team** of UG Academic Council, IIT Bombay
- Setup **Rural Data Research & Analysis Lab** (RuDRA) as a Teaching Assistant (TA) in IIT Bombay with Rs. 2 million budgets

EDUCATION

Indian Institute of Technology Bombay | Post Graduation   **Mumbai, IND**
Specialization: Technology and Development   *July 2018 - July 2020*

- Cumulative CGPA: **9.3/10**
- Machine Learning in Remote Sensing | Advanced Statistics | Satellite Image Processing | Project Management | Probability

Indian Institute of Technology Kanpur | Graduation   **Kanpur, IND**
Specialization: Mechanical Engineering   *Aug 2013 - July 2017*