

# Aman Lonare

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📍 Tokyo, Japan

## PROFESSIONAL EXPERIENCE

### Hitachi R&D, Center for Technology Innovation

Tokyo, JPN

Research Software Engineering, Services Computing Research Dept.

Jan 2021 – Present

- Developed a tool in Python for assisting in the implementation of CQRS and Event Sourcing design patterns for business users
- Designed and performed evaluation of Core Banking application using AxonIQ Framework with Prometheus and Grafana
- Reduced the overall development time by 15% using Domain Driven Design (DDD) principles of software development process
- The tool introduce the event driven architecture in the system and integrate the Data Science, Machine Learning into solution
- Proposed a plan to integrate the developed tool in Hitachi's indigenous framework for microservices application development

### 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 with CNN using open source satellite images from GEE at village level
- 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. (2020). Village Level Identification of Sugarcane Crop in India using Open Source Satellite Images. Acta Geophysica. Submitted for publication

## 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 the **Data Analytics and Visualization Team** of IIT Bombay providing expertise for Institute data analysis
- 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

- Major Project: Fabrication of Non Destructive Testing Tool for Machinery Inspection