## ABHISHEK SANTOSH REVADEKAR

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### **EDUCATION**

#### STONY BROOK UNIVERSITY

Stony Brook, New York

Master of Science in Computer Science | Cumulative GPA: 3.57/4.00

Expected Dec. 2023

Coursework: Operating Systems, Natural Language Processing, Introduction to Computer Vision, Probability & Statistics.

#### UNIVERSITY OF MUMBAI

Mumbai, India

Bachelor of Technology in Computer Science | Cumulative GPA: 9.12/10.00

May 2021

Coursework: Data Structures and Algorithms, Database Systems, Networks, Distributed Systems, Software Engineering.

### **WORK EXPERIENCE**

BNP PARIBAS Mumbai, India

### Software Engineer - Liquidity Management Team

Jun. 2021 - Jun. 2022

- Led critical feature update for On-demand Cash Pooling involving lending and borrowing limit constraints, leveraging Java-Spring Boot, SQL, Angular and UNIX jobs and increasing client satisfaction by 30%.
- Automated client report generation, cutting manual effort by 50% and improving delivery time by 35%.
- Streamlined cash pooling project communication and planned 2022 roadmaps in China, reducing misalignment.
- Provided Level 3 support, resolving data patch requests within 1 hour on average and circumventing production failures.

## Software Development Intern - ATLAS2 Design and Development Team

Jan. 2021 - Jun. 2021

- Developed Java-based data handling APIs and migration scripts for 400+ parameter tables in the JGestab application.
- Improved business rule logic in JGestab parameterization tool by analyzing COBOL code, reducing errors by 20%
- Implemented an automated testing script using Selenium-Java to evaluate business rule logic, increasing testing efficiency by 30% and identifying fail cases promptly.

## **UNIVERSITY PROJECTS**

# DataSurge: A Distributed, Real-Time Data Pipeline

May 2023 - Present

- Engineered a modular distributed real-time data pipeline, using Java-Spring Boot, Apache Kafka, Docker and Kubernetes.
- Orchestrated seamless integration of diverse data sources and flexible data model configuration, utilizing separate Kafka topics for scalability and low-latency streaming of 400 events per second and a data load of around 3 GBs per day.

### A Lightweight Hypervisor for Linux and VM latency measurement

Feb. 2023 - May 2023

- Developed a custom Type 2 hypervisor using C and inline Assembly for Intel VT-x, improving virtualization.
- Achieved efficient performance with average VM latency of 600 CPU cycles by executing guest code in Assembly.
- Studied 2-level nested virtualization, observing 45% increase in VM latency on VMWare compared to direct host access.

### EyeCanDo - An iOS-based Eye Movement Tracking for HCI Assistance for ALS patients Jan. 2023 – May 2023

- Enhanced app calibration accuracy by introducing homography for gaze points using Swift, ARKit and Objective-C++.
- Created a testing module to quantifiably assess the impact of calibration enhancements on eye tracking accuracy, establishing a 20% improvement in calibration precision.
- Deployed CoreML, Tensorflow and PyTorch models on iOS for performance analysis in Xcode Instruments.

### **TECHNICAL SKILLS**

Languages: Java, Python, C/C++, JavaScript, HTML, CSS, React, Angular, Android, Swift, Scala, Shell scripting.

Frameworks & Libraries: Java - Spring, iOS - ARKit, CoreML; Python - Django, OpenCV, Pandas, NumPy.

Databases & ETL Tools: SQL, MongoDB, Hadoop, Apache Kafka, WEKA.

Development Tools: Agile, Scrum, JIRA, Git, Linux, Anaconda, Docker, Kubernetes.

#### **OTHER ACHIEVEMENTS**

**Awards:** "Best Paper Presentation" award for "Bidirectional Sign Language Translation" - ICCICT 2021 conference; "Best Paper" award for "Pothole Detection using Accelerometer and Computer Vision" - ICPSC 2021 conference.

Publications: Contributed 5 research papers in the Machine Learning space. Link: https://tinyurl.com/AbhiR-GScholar.

Research Mentor for the AutoBuddy project in collaboration with Tata Institute of Social Sciences.

Extracurriculars: Dance Instructor, Vice Chairperson of Oculus 2020, Organizer for S.P.I.T Donation Drive & Fundraiser.