Abhishek Santosh Revadekar

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Summary: Passionate software developer with 1.5 years at BNP Paribas and pursuing a Master's degree in Computer Science at Stony Brook University. Proficient in software development, data engineering, and data science, blending technical innovation with creative ingenuity and cutting-edge research. A proven project leader, committed to driving transformative change through technology.

EDUCATION

Stony Brook University — Stony Brook, New York
Master of Science in Computer Science | GPA: 3.6/4.0 — Aug. 2022 – May 2023
Coursework: Introduction to Computer Vision, Natural Language Processing, Probability & Statistics, Operating Systems.

University of Mumbai — Mumbai, India
Bachelor of Technology in Computer Engineering | GPA: 9.1/10.0 — Aug. 2017 – May 2021
Coursework: Data Structures & Algorithms, Big Data Analytics, Decision Making and Business Intelligence, Software Engineering.

TECHNICAL SKILLS

Languages: Java, Python, C/C++, JavaScript, HTML, CSS, React, Angular, Node.js, REST, Android, Swift, Scala, Shell scripting.
Frameworks & Libraries: Java - Spring; iOS - ARKit, CoreML; Python - Django, PySpark, Flask, Selenium; C++ - STL, OpenCV.
Databases & ETL Tools: MySQL, PostgreSQL, Hadoop, Apache Kafka, Cassandra.
Machine Learning: PyTorch, Tensorflow, Keras, Sklearn, Matplotlib, Pandas, NumPy, OpenCV, NLTK, CUDA.
Development Tools: Agile, JIRA, Git, Xcode, VS Code, Linux, Anaconda, Docker, Kubernetes.

WORK EXPERIENCE

Stony Brook University — Stony Brook, New York
Graduate Research Assistant - Human Computer Interaction — Jan. 2023 – Present

- Enhanced app calibration accuracy by 15% introducing homography for gaze points using Swift, ARKit and OpenCV.
- Trained a distributed PyTorch model, on multiple GPU-enabled servers, for phrase-level gesture typing using a BERT-based encoder-decoder network and a 5M+ gesture simulation dataset.

BNP Paribas — Mumbai, India
Software Engineer — Jun. 2021 – Jun. 2022

- Led critical updates for On-demand Cash Pooling, by automating client reports and merging lending/borrowing limits using Java, Oracle SQL, and Angular. Boosted client satisfaction by 30% through adept leadership and teamwork.
- Synchronized cash pooling project communication, guided China team in 2022 roadmap planning to minimize misalignment.
- Delivered L3 support, averaging 1-hour resolution for data patches, averting production failures.

Software Development Intern — Jan. 2021 – Jun. 2021

- Developed Java-based data handling APIs and migration scripts for 400+ parameter tables in the JGestab application.
- Automated business rule evaluation with Selenium and Java, increasing testing efficiency by 30% and 10% reduction in errors.

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.
- Integrated diverse data sources with flexible data model configuration with a stream rate of 400 events/sec and ~3 GB/day load.

NeuroLogic Decoding using a subset of LTL semantics — Sep. 2022 – Dec. 2022

- Added Linear Temporal semantics into Seq2Seq and beam search achieving 18% BLEU score improvement..
- Introduced innovative order score metric alongside coverage score, and achieved 24% and 11% improvement, respectively.

Attention estimation in students based on body posture — Mar. 2021 – Jun. 2021

- Implemented a robust attention detection model using body posture on e-learning platforms, achieving a 92% accuracy on five most prevalent postures.
- Leveraged Convolution (CNN) and Recurrent Neural Networks (RNN) with transfer learning for posture detection.
- Curated a dataset of 20,000+ video frames from student peers, leveraging OpenPose for accurate posture keypoint extraction.

KEY ACCOMPLISHMENTS

Publications: 5 research papers in Machine Learning space (42 citations). Google Scholar: https://tinyurl.com/AbhiR-GScholar.
Awards: "Best Paper Presentation" award at ICCICT 2021 conference; "Best Paper" award - ICPSC 2021 conference.
Research Mentor for the AutoBuddy project in collaboration with Tata Institute of Social Sciences.