Akanksha Kale

www.akankshakale.com | (631) 961-4550 | akkale@cs.stonybrook.edu | linkedin.com/in/akankshaakale

EDUCATION

Stony Brook University — Stony Brook, New York
Master of Science, Computer Science — *Aug 2021 – Dec 2022*

University of Pune — Pune, India
Bachelor of Engineering, Computer Science : GPA 8.4/10 — *May 2019*

TECHNICAL SKILLS

Languages: Java, Python, SQL, LaTeX, MATLAB, C, C++, JavaScript, Shell, Angular
Domains: Full Stack Development, Deep Learning, Data Science, Computer Vision
Technologies: OpenCV, PyTorch, Tensorflow, Spring, MongoDB, AWS
Tools: Jupyter Notebook, Git, Bitbucket, Selenium, JIRA, Arduino, Android Studio

EXPERIENCE

Computer Science Department, SBU — Stony Brook, New York
Graduate TA — Course: Computer Science Principles — *Aug 2021 – Ongoing*
- Assist the Professor with grading, formulating assignments, homework for 190+ students and solving their queries.

Deloitte Management Consulting — Mumbai, India
Analyst — Systems Engineering — *Dec 2019 – July 2021*
- Enhanced an Automated Decision Engine for Eligibility Determination built on Spring framework for a database of 6M beneficiaries .
- Proposed, led and delivered a framework to generate Selenium scripts to automate driver flow of 758 web pages that acquired a revenue worth 11M $ from the client.
- Engineered an auto-invoking batch script in Shell for Bamboo server that conserved manual effort by 175%

Persistent Systems — Pune, India
Research Intern — Brain Computer Interface with EEG | [Research Paper] — *June 2018- June 2019*
- Discovered a mind-controlled communication system for Quadriplegic individuals using 5-channel EEG headset and 4-layer LSTM network.
- Demonstrated a streamlined model on 323 user actions, 100+ different users with a response time of 2 seconds with an accuracy of 93%.
- **Patent**:*A System and Method for Dynamic Virtual Structuring Of Parkings in Real-Time* [Application#: 201921051068]

RESEARCH PROJECTS AND PUBLICATIONS

M.I.T Robotics Lab — *Jan 2016- April 2018*
- Headed the Development of Autonomous Robots that learn to plan trajectories from video feed and Infrared Sensors in an obstacle course for ABU Robocon, Asia Pacific
- Succeeded as the 1st ever team in ABU Robocon 18' to navigate the course in 21 seconds using Image Processing

Monitoring Parking Spaces | NTU, Singapore — *Nov 2018*
- Built a real-time system using Google GeoTagging, HOG feature extraction, Faster R-CNN for vehicle detection & made a dynamic area-division algorithm
- Eliminated the need of existing sensor-based systems by automating restructuring of grids & used Audio QR for authentication hence nullifying cost, saving configuration & scanning-time over RFID.
- Rewarded by Prime Minister of India & Education Minister of Singapore
- **Patent**: *A System and Method to Perform User Activity Using an Electroencephalogram* [Application #: 201921011129]

AWARDS AND ACHIEVEMENTS

- **GPS Game Changer Award, Deloitte |1 in 5000|** *For singlehandedly tailoring a custom framework alongside regular deliverables and acquiring additional revenue from the client | 2021*
- **Spot Award, Deloitte |1 in 1000|** *For efficient, early code delivery with 0 defects in 3 consecutive sprints | 2020*
- **KPIT Sparkle Innovation Challenge | Finalist |** *For showcasing an innovative idea on Vehicle Authentication with brain's EEG signals that amplifies a layer of security in the machine | 2019*
- **Singapore India Hackathon, NTU Singapore | 3rd/50 |** *Represented India and awarded the 3rd prize for a novel 0 cost solution for parking monitoring | 2019*
- **Smart India Hackthon, IIT BHU |Winner|** *Predicted water scarcity, crop productivity and broadcasted it with a multilingual app to equip 8 million farmers across the country | 2018*