AMLAN GUPTA

(716) 602-8071 • gupta.amlan@gmail.com • amlangupta.com
linkedin.com/in/amlan-gupta • github.com/nullbringer

EDUCATION

University at Buffalo, The State University of New York   **Expected Dec 2019**
- Master of Science, Computer and Information Science
- Courses: Algorithms Analysis and Design, Introduction to Machine Learning, Computer Vision and Image Processing, Computer Security, Data-Intensive Computing, Distributed Systems, Software Verification

West Bengal University of Technology, India   **Jul 2013**
- Bachelor of Technology, Computer Science and Engineering
- Courses: Data Structures, Computer Architecture, Automata, Operating System, Database Management

EMPLOYMENT

Software Engineer   **Tata Consultancy Services, Johnson & Johnson**   **Mar 2014 – Jul 2018**
- Performed full-stack development including design and troubleshooting of the product, validation of needs in conjunction with onsite and offshore teams following Agile-Scrum methodology.
- Crafted a chatbot framework using Dialogflow that induced 80% cost reduction for the client's support team.
- Championed strict code quality control, reinforced best practices, optimized, re-factored existing code bases increasing clarity, consistency, and maintainability.
- Engineered a DevOps model that boosted sprint velocity by 18%, reduced code error margin by 28%.

PROJECTS

- **Amazon Auto-repricing** (2015): A SaaS platform powered by Amazon Merchant Web Service API that syncs inventory, orders, automatically adjusts prices by analyzing competitor products. (*Java, MySQL, AngularJS*)
- **Kolspot.com** (2010): Co-founded, developed and maintained the first social networking site for the residents of Kolkata, an eastern city in India. Had more than 5000 active members in its prime. (*PHP, MySQL, jQuery*)
- **Big Data Analysis and Visualization** (2019): Using multiple live data sources, engineered a data acquisition and analytics pipeline that explored data on top companies (*Python, Hadoop, MapReduce, spaCy, D3, Docker*)
- **Digit Recognition** (2018): The project ensembles different prediction models like Linear regression, Logistic regression, Neural network, SVM, Random Forest by soft voting on MNIST, USPS dataset. (*Python, Keras*)
- **Reinforcement learning** (2018): Using Deep Q-Learning process, the agent learned to navigate the grid-world environment and chases the target in the most efficient manner. (*Python, Keras, Tensorflow*)
- **Group Messenger** (2019): A distributed peer-to-peer group messaging app that guarantees Total-FIFO ordering using ISIS algorithm. The system is fault-tolerant and easily scalable. (*Java, Android, Socket*)
- **SimpleDynamo** (2019): Amazon Dynamo styled scalable key-value storage with partitioning, quorum-based replication, and failure handling that guarantees simultaneous availability, linearizability, and eventual consistency. (*Java, Android, Socket Programming*)
- **FSM 2.0** (2019): An eclipse plugin that extracts and draws finite-state models from execution traces of Java programs and performs runtime property checking of the model. The properties are stated in propositional temporal logic augmented with built-in data types. (*Java, Plant-UML*)

LANGUAGES AND TECHNOLOGIES

- Java, Javascript, Python, PHP, HTML5, CSS3, R
- Oracle, MySQL, SQL Server, MongoDB
- Spring, Hibernate, jQuery, AngularJS, NodeJS, Express.js, Bootstrap, Selenium, jUnit
- Keras, TensorFlow, scikit-learn, Pandas, Numpy, Matplotlib, OpenCV
- Gulp, Less, Sass, Maven, Git, Jira, Jenkins, Hadoop, Docker, D3, GraphQL

PROFESSIONAL HONORS

- Star Team Award, 2018
- Service & Commitment Award, 2017
- LIREL Honor Rolls, 2014