Komal Gyanani

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EDUCATION

M.S. in Computer Science **Stony Brook University – New York, USA** *Expected Graduation: Dec 2018*
(GPA: 3.75/4.00)

Courses: Probability and Statistics for Data Science, Data Mining, Theory of Databases, Artificial Intelligence, Introduction to Computer Vision, Computational Biology, Analysis of Algorithms

B.E. in Computer Science **Faculty of Technology and Engineering,** *Jul 2009 – May 2013*
(Aggregate GPA 3.98/4.00) **Maharaja Sayajirao University of Baroda, India**

TECHNICAL SKILLS

Skills: Java, Python, C, C++, OpenCV, Tensorflow, Oracle 11g, Teamcenter, JIRA, Tortoise SVN, Git, Jenkins, JUnit, Agile
Interests: Reading fiction, watching soccer, cooking

WORK EXPERIENCE

Software Engineering Intern **Google Inc., Mountain View, USA** *May 2018 - Present*

- Working with Google Shopping Express team to develop a product based on US Postal service data, using Java, REST API calls and Google protocol buffers, which would be used for low latency queries results to match valid deliverable addresses

Software Engineer **HCL Technologies, Pune, INDIA** *Nov 2016 - June 2017*

- Worked in Agile model with a cross-functional team to develop a customized tool for BMW to automate gap analysis, using Java, GWT toolkit, Sencha GXT and service oriented architecture
- Worked as acting Scrum Master, in close collaboration with the onsite business analyst, for DoR and DoD of two sprints
- Awarded "QWiz" – quality champion team of the quarter maintaining high delivery standards during Q1 2017. Used static code analysis tool SonarQube alongside weekly peer reviews to maintain client prescribed coding standards

Solutions Developer **TATA Technologies, Pune, INDIA** *Jan 2014 - Nov 2016*

- Led a team of ten to prepare a presentation for the client highlighting the value addition of $65 million over the past decade
- Designed a web-application, using Java EE, struts framework and C++, for the multi-site architecture of Fiat Chrysler Automobiles to generate real-time data sync status reports. Was part of the project right from requirements gathering, design, implementation to deployment and providing production support
- Suggested and designed a business development initiative with annual savings of $100K, to automate vehicle structure completion by importing data from remote sites designed using C++ and Perl
- Led the project team to ensure project readiness for CMMI level 3 certification

ACADEMIC PROJECTS

- **CSE 537 Artificial Intelligence, Fall 2017**
  - Designed the famous game of Pacman using Python. Implemented uninformed and informed search as well as adversarial search algorithms, and heuristic functions for efficient navigation. Encoded Bayesian Network principles for ghostbusters.
  - Designed a decision-tree based model to predict if the visitor will view another page on the site given a set of page views
  - Design a spam filter to classify emails as spam/ham using Naïve Bayes classifier using Python
- **CSE 527 Introduction to Computer Vision, Fall 2017**
  - Designed MNIST digits classifier using CNN and Transfer Learning using Tensorflow and Python
  - Implemented vision techniques like applying image filters, features and stitching, object detection and tracking, interactive segmentation using superpixels and maxflow and deriving structure from motion in OpenCV and Numpy
- **Github dataset insights and analyses – CSE 544 Probability and Statistics for Data Science, Spring 2018**
  - Built and tested hypotheses to draw insights from Github dataset using Google BigQuery and hypotheses testing techniques in Python
- **Long Read Genome Mapping Algorithms – CSE 549 Computational Biology, Fall 2017**
  - Implemented Min-Hash and Containment algorithms in C++ and compared the results with simulated data for long read genome sequencing. Also designed a mapper function that checks for similarities to map long reads to genomes
- **SheHacks 2018 – Hackathon**
  - Designed a machine learning based tool to predict future medical conditions a patient might develop based on his past medical history and demographics based on logistic regression model using pandas, scikit-learn.
  - Designed data analytics portal using Tableau, matplotlib to analyse disease prevalence based on demographic factors
- **Hack@CEWIT – Hackathon (Winner of Northwell API baking challenge)**
  - Designed a user-friendly portal to view patient records; used frontend technologies while also integrating with backend REST APIs to fetch data
- **Fetal HeartRate Monitoring**
  - Retrieved and decoded electrical signal data using REST API calls and built a DB to store it. Working on building a machine learning model to determine if a C-section is required during labour