

Mrunmayee Shirodkar

mrunmayeeshirodkar@gmail.com | Phone: (207) 319-2714 | <http://www.scf.usc.edu/~mshirodk/index.html>
<https://github.com/mrunmayeeshirodkar> | www.linkedin.com/in/mrunmayee-shirodkar-bb43a7b0

EDUCATION

Master of Science in Computer Science, University of Southern California (May 2019) **GPA: 3.32**
Bachelor of Engineering in Information Technology, University of Mumbai, India (Jul 2015) **Score: 79.25%**

TECHNICAL SKILLS

Languages: Python (4+ years), HTML5/CSS, Javascript SQL (6+ years), PL-SQL, MySQL, NoSQL
Frameworks: jQuery, Bootstrap, selenium, Reactjs, Django(1+ years)
Tools: Tableau (3+ years), Advanced MS Excel (6+ years), Android Studio, MS Access, MySQL Workbench
Platforms: Amazon Web Services (EC2, S3, Elastic Beanstalk, Rekognition), Google Cloud Platform (SQL, APIs, Dataproc)

WORK EXPERIENCE

Lead Developer, USC (July 2019 – Present) (**Python, Django, HTML, CSS, JavaScript, Bootstrap, jQuery, MySQL, Tableau, AWS EC2, Reactjs**)
AARDVARC (<http://www.acadoinformatics.com/aardvarc/>)

- Redesigned application front-end for better user experience and improved webpage response time by 80%.
- Implemented modules for peer observation and faculty assessment thereby reducing manual workload by 100 hours/year.
- Ideated and implemented dashboard for administrators for a quick glimpse of progress using **chart.js**.
- Performed unit testing using cucumber and functional testing using selenium, thereby reducing manual testing time by 3 hours/week.
- Led a team of two to manage and develop various new modules and features.

Scholarly Project (<https://psp.acadoinformatics.com>)

- Full Stack development of PharmD Scholarly Project which enabled students and faculty to manage their scholarly work.
- Completely remodeled and migrated the non-relational key-pair data to a relational database with 100% success.
- Single-handedly migrated the complete application to AWS infrastructure to share EC2 instance thereby saving about \$5000/year.

Data Analyst – Student Worker, USC (June 2018 – May 2019) (**Tableau, MySQL, Python, Django**)

- Created over 150 interactive and dynamic dashboards in Tableau to answer student, faculty, and school-related business questions.
- Created visualizations in Tableau with (Excel, MySQL) using advanced graphs - Motion chart, Bump chart, Donut chart.

Software Development Intern, Korean Air ITDC (Jun 2018 - Aug 2018) (**AWS Rekognition, S3, XCode, Manual & Automated Testing**)

- Designed and implemented manual and automated test scripts for Korean Air iOS App using XCode and reduced bugs by 60%.

Software Development Analyst, Accenture (July 2015 - March 2017) (**Oracle SQL, PL-SQL, Microsoft Excel, Uniface**)

- Created macros to project objectives achieved and team efficiency using advanced Excel to reduce efforts by 8 hours per week.
- Automated daily procedures in uniface to achieve a reduction in manual efforts by 1000 hours per year.
- Improved the efficiency of SQL reporting by 70% for daily processes, such as customer connection requests, issues and mobile top-ups.
- Developed a payment interface module in uniface to achieve easier and quicker on-call payment functionalities.

RESEARCH AND PUBLICATIONS

Manuscript titled *Automated Attendance Management System using Face Recognition* published in International Journal of Computer Application (IJCA). *Digital Library URL:* <http://www.ijcaonline.org/proceedings/icwet2015/number2/20940-5026>

PROJECTS

Travel & Entertainment Search Android App and Website (**HTML, CSS, JavaScript, JQuery, PHP, Angular, Nginx, JSON**)

- Designed and developed a website in Php using Google APIs(Places, Nearby Search, Maps, Reviews, Autocomplete) and Yelp API (Reviews).
- Developed completely independent server-side and client-side scripts for faster response time(less than 3sec).
- Implemented responsive web design using Bootstrap and CSS3 media queries. Implemented local storage for storing favorite places' data.
- Developed an **android app** with attractive UI in addition to the above functionalities.

SOLR Search Engine (**PHP, jQuery, Apache Solr, HTML5, CSS, Bootstrap, Java, Hadoop, GCP Dataproc**)

- Crawled 20,000 webpages of LA Times using Crawler4j (open source web crawler) & determined URL fetch statistics.
- Implemented custom search engine having features such as text-autocompletion and spelling correction to improve user experience.
- Created an Inverted index by TF-IDF technique using a subset of project Gutenberg corpus for improving the query response time by 200%.

Data Mining on Yelp Dataset (**Python, Hadoop, MapReduce, Apache Spark**)

- Performed custom data partitions to improve data retrieval performance by 200% in a distributed environment.
- Explored various yelp datasets and executed operations on data to acquire statistics of reviews, ratings, locations, and categories of businesses and analyzed the results.
- Performed market basket analysis on the yelp dataset using SON and Apriori algorithms in a distributed environment.