

## PRADIPTA PARIYAL

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### EDUCATION

- Master of Science, Computer Science**, University at Albany, State University of New York May 2019 (GPA-3.77/4)
- Bachelor of Engineering, Computer Science**, Gujarat Technological University June 2015 (CGPA-7.6/10)

### WORK EXPERIENCE

- Graduate Assistant, University at Albany** Aug 2018 – Present
- Involved in concept design and implementation of the Digital Scholarship Website in the University Library
  - Created lesson plan and conducted iLearn workshops for Text Analysis and Natural Language Processing using python
- Software Engineer, Atos Pvt. Ltd., Pune, India** March 2016 - June 2017
- Developed web applications using Spring MVC framework and Maven using bootstrap, CSS, HTML, JS
  - Integrated application with database and writing complex SQL queries to store and extract data
  - Implemented using the Agile Software Development Methodology (JIRA) tool and version controlling using Git
  - Written JUnit test cases and verified code quality using SonarQube
- Software Intern, Indian Space Research Organization, India** July 2014 - May 2015
- Implemented the scheduling algorithms to resolve the issue of starvation, a disadvantage of priority scheduling using Core Java
  - Worked on Design, Analysis and Implementation of Fairness Algorithm for Satellite Mobile Radio Talk (SMRT) a satellite-based system for providing communication during catastrophic events like floods, earthquakes, landslides

### TECHNICAL SKILLS

- Languages:** Core Java, J2EE, Android, HTML5, CSS3, PL/SQL, Python
- Frameworks:** Spring boot, MVC, Angular 5, Node JS, JavaScript, Bootstrap, RESTful web services
- Tools:** Maven, JIRA, Git, Confluence, Postman, Jenkins, SonarQube, AWS, scikit-learn, Natural Language Toolkit

### ACADEMIC RESEARCH AND PROJECTS

- Analyzing Epistemic Complexity of Student Notes** Ongoing
- Tools/Platform:** - Python, OOPs concepts, SVM, Logistic Regression, Random Forest, NLTK
- Aim is to find the epistemic complexity of student notes in a computer-supported collaborative learning(CSCL) and provide an immediate feedback to improve their fundamentals using Machine Learning Approach.
  - Implemented different models to classify the text into fact or explanation and further classify into elaborated or unelaborated
- Go-Amigo (Team Project)** Jan 2018 - May 2018 [GitHub Link](#)
- Tools/Platform:** - Angular 5, Node JS, Mongo DB, Express JS, Bootstrap, HTML5, CSS, Google Places API
- Developed MEAN Stack web app where user can plan trips, create groups and travel together, search nearby places, manage budget, chat and upload memories
  - Create user interfaces for entire app, developed complete functionalities for Plan Trip module, integrated the Google maps for nearby restaurants, ATMs
- PicShare** Jan 2018 - May 2018 [GitHub Link](#)
- Tools/Platform:** - Spring Boot, Spring data JPA, MVC, MySQL, AWS EC2, S3, RDS
- Developed a social networking platform using Spring Boot where users can add friends, create posts in form of audio and image, post comments and receive notifications
  - Utilized Bootstrap and HTML for user interface design, JavaScript for client side validations in the JSP pages
  - Configured the database using Spring data JPA with MySQL and Amazon RDS as the cloud database
  - Hosted the site on Amazon Web Service EC2 instance and media storage using S3 Bucket
- Twitter Sentiment Analysis** March 2018 [GitHub Link](#)
- Tools/Platform:** - Twitter REST API, Python, Naïve Bayes, SGDC Classifier, matplotlib
- Collected more than 4000 tweets related to product reviews, preprocessed it to maintain data quality standards
  - Involved in feature construction and building classifier model using Naïve Bayes, SGDC classifier to distinguish whether the tweet is positive, negative, irrelevant or neutral using Python
  - Partitioned data for k-fold cross validation, represented the performance metrics like accuracy, precision on bar chart

## Topic Modeling

April 2018 [Github Link](#)

**Tools/Platform:** - Python, gensim, pyLDAvis, matplotlib, NLTK

- Aim was to extract good quality topics from the BBC News dataset, Twitter Product Reviews and Chat Conversations that were clear, segregated and meaningful
- Implemented the Latent Dirichlet allocation (LDA) and Latent Semantic Analysis (LSI) models using python

## Gender based POS tagging using Stanford NLP

Feb 2018 [Github Link](#)

**Tools/Platform:** - Core Java, Stanford CoreNLP Tools

- Worked on chat room conversations dataset and produced XML output for tokenizing, sentence splitting identifying the Parts-of speech, lemma and named-entity recognition using Stanford CoreNLP tool
- Implemented algorithm in Java to calculate the usage of pronouns (gender-specific) in the dataset comprising of chat conversations

## Document Classifier (Team Project)

August 2018 – December 2018 [GitHub Link](#)

**Tools/Platform:** - Python, K-nearest neighbor, SVM, Multinomial Naive Bayes Algorithm, Logistic Regression

- Aim was to assign class or category to an article based on content, making it easier to manage and sort
- Implemented the K-nearest neighbor, SVM, Multinomial Naive Bayes Algorithm, Logistic Regression Model and compared the accuracy.
- BBC Data set - 2225 labelled articles divided into 5 categories (Training Data)
- FOX news- 541 articles collected through web crawling from FOX news official website (Testing Data)

## Food Detection (Team Project)

August 2018 – December 2018

**Tools/Platform:** - YOLO (You Only Look Once), COCO dataset, YOLO Annotation tool

- Applied Convolutional neural network (CNN) to the tasks of detecting and recognizing food images and its associated calorie content
- Explored workflow of YOLO (You Only Look Once), YOLO9000 and YOLO v3 using self-trained and pre-trained models
- Annotated images from COCO dataset and converted boundary box co-ordinates using YOLO Annotation tool

## Pune Travelogue (Team Project)

Jan 2016 [GitHub Link](#)

**Tools/Platform:** - Android, Google Maps REST API, Yahoo Weather REST API

- Android App for the people new to Pune which included must visit places, nearby places and restaurants, user comments
- My role included designing the user interface and integrating the Google Maps REST API to provide the distance between the user's current location and the must visit place
- Consuming Yahoo Weather REST API for current weather

## CERTIFICATION AND AWARD

- Received the Anna Radkowski-Lee Graduate Assistantship Award
- Post Graduate Diploma in Mobile Computing from Center for Development of Advanced Computing, Pune, India Jan 2016