

POOJA AGARWAL

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EDUCATION

Stony Brook University, New York Master of Science, Computer Science Courses – Analysis of Algorithms, Introduction to Computer Vision, Data Visualization, Network Security, Big Data Algorithms & Networks	Jan 2019 - May 2020 (Expected) GPA : 3.49
Institute of Technical Education and Research, Bhubaneswar, India Bachelor of Technology, Electronics and Communication Engineering	Aug 2010 - May 2014 GPA : 4.0

TECHNICAL SKILLS

Programming Languages	Python, PHP, C#, HTML, JavaScript, CSS, R Programming, C++
Libraries, Frameworks & CMS	Angular, Drupal, JQuery, RestAPI, D3.js, NodeJs
Database	MySQL, ElasticSearch, MongoDB
Deployment Tools & Processes	Git, JIRA, Unit Testing, Agile Methodology

WORK EXPERIENCE

Accenture (Application Development Analyst)	May 2017 — Jan 2019
Angular : Streamlined ticket resolving process by creating an application to monitor ticket status integrated with workflow functionality. Processing time of tickets improved by 35% .	
C# : Optimized search and filter API query time response by integrating Elastic Search and using C# for querying the search engine and writing Rest API's . Performance of the application was 30% faster .	
R : Reduced the complaint tickets count by 10% using R programming to perform analytics, text mining and prediction. Developed an interactive website using shiny package charts for Data visualization along with the option of saving the visualized components.	
Python : Delivered a tool to simplify the task of querying different databases by providing an option to connect, edit and add the database connections for multiple databases like MySQL , MongoDB, Hive etc from a single interface.	
MongoDB : Automated repetitive CRUD tasks on MongoDB for high volume of data by creating a script using C# and XML configuration which resulted in 35% more efficient system then legacy.	
Drupal : Saved 70% of time by automating Drupal task of fixing coder issues related to maintaining coding standards through a script file.	
Tata Consultancy Services (Software Development Engineer)	June 2014 — May 2017
Drupal : Developed and maintained responsive and multilingual websites on Drupal, handled CMS configuration, site migration and optimizing performance [Bootstrap and Front End Web technologies]	
Angular JS: Worked on developing an application to fetch posted blogs, stories on yammer along with Like and Comment feature using RestApi, combined with NodeJS for optimization using Grunt and Drupal for better website functionalities.	

PROJECTS

Terrorism Visual Analytics (Academic) - Created an interactive visual interface that allows users to gain insight on terrorist activities around the world. [**Python Flask, D3, HTML, CSS, JQuery**] . The major highlights were –

- Prediction of casualties using decision tree model
- Data Manipulation such as Dimension Reduction and Data cleaning of dataset of size more then 180000

Drupal Module and Theme Generator (Open Source) - Coded a npm module in Github - 'generator-drupal-module-theme' integrated with **yeoman** and optimization tools like Grunt to automate Drupal modules and theme creation task that can **save development time by 15%**. [**PHP, JavaScript**]

Electronic Fetal Monitoring to improve Perinatal Outcomes and Reduce Frequency of Cesarean Deliveries (Ongoing Research) –

- Built a large, de-identified **MySQL** database to store decoded data from intrapartum signals (FHR and uterine activity) and physiological data to capture the dynamics of fetus well-being on a minute-by-minute basis. [**Python**].
- **Future work** involves investigating machine learning methods for classification of intrapartum signals that has the potential to significantly outperform the accuracy of contemporary methods.

Evaluation of security of websites (Academic Research) –

- Studied security features implemented by top 10K websites in terms of security questions, 2 Factor Authentication and OAuth Authorization.
- Used **Scrapy** and **Selenium** to crawl websites and extract authentication policies to understand trend of password policies over years. [**Python**]

ACCOMPLISHMENTS

- **Teaching Assistant** for CSE 303 (Theory of Computation) at Stony Brook University
- **Young Achiever Award** - Awarded for diverse contributions and participation, highest customer satisfaction rating for all software solutions delivered, engendered new ideas, automation, and involvement in multiple technology stack projects.
- **On the Spot Award** – Received 5 Awards due to numerous client appreciations for building a website.
- **Team Lead** at Tata Consultancy Services Initial Learning Program - Developed a Food ordering website in Java using waterfall model.