# **SHWETA GODSE**

M.S. Research - Systems Engineering and Theoretical CS

Ph: +91-9930392572





# **BRIEF SUMMARY**

Highly motivated and detail-oriented professional seeking a challenging position to leverage strong analytical and problem-solving skills in designing, developing, and maintaining cutting-edge software solutions. Eager to apply comprehensive knowledge of programming languages and software development methodologies to drive success in a collaborative and growth-oriented environment.

#### **KEY EXPERTISE**

C C++	Python HTM	L CSS	Javascript	AngularJS	MySQL	Tableau	Visual Studio	o Po	wer BI	Bootstrap
MS Office	Data Structures	Algorithm	s DBMS	Software D	Developmen	Operat	ing Systems	PHP	Git	Github

EDUCATION	
Indian Institute of Technology, Mandi  M.S. Research - Systems Engineering and Theoretical CS   CGPA: 7.50 / 10	2020 - 2024
Ramrao Adik Institute of Technology  B.E Information Technology (Full Time)   CGPA: 8.33 / 10	2014 - 2018
Pace Junior Science College, Thane 12 <sup>th</sup>   HSC   Percentage: 81.38 / 100	2014
DAV Public School,Airoli  10 <sup>th</sup>   CBSE   CGPA: 10 / 10	2012

## **AWARDS AND SCHOLARSHIPS**

- Secured Second runner-up in Project Deep Blue-Season 3 held by Mastek Ltd. in the year 2018
- Secured Scholarship of higher education from MSBSHSE in the year 2014.

#### **INTERNSHIPS**

Mastek Ltd. 12 Jun, 2018 - 13 Jul, 2018

Project Trainee

Key Skills: AngularJS Node.js Express.js MySQL

Successfully completed Internship at Mastek Ltd. by working on devising a recruitment system for the organization.

# **PROJECTS**

#### Frequency estimation in large datastream using Count Min Sketch

Key Skills: Python

- 1. Devised an algorithm to estimate the frequency of a large stream of data using Count Min Sketch.
- 2. It uses a customizable data structure to provide own hash functions and the number of buckets.
- 3. The results were validated using RMSE (Root Mean Square Error) metric on the transaction dataset available from University of Antwerp.
- 4. Impact: The devised algorithm can minimize memory greatly and avoid equality checks.

## **Teaching Learning System**

Key Skills: Uppaal Software

- 1. Built a project which involved booking rooms for lectures by the faculty in the institute using Uppaal Software.
- 2. It allowed the faculty to book rooms for specific time slots which was managed by a manager.
- 3. Impact: It helped in smooth functioning of lecture schedules in the institute and issue such as overbooking was handled properly.

#### Optical Character Recognition(OCR)

Key Skills: Python MySQL Flask HTML CSS

- 1. Developed an OCR system to recognize English handwritten alphabets and numbers from words in a sentence.
- 2. Our solution using neural network achieved 84% accuracy rate when compared with standard dataset taken from EMNIST.
- 3. Utilized Flask for web deployment and MySQL for database management.
- 4. Impact: Enabled NGOs to digitize handwritten documents, improving data accessibility.

# **Character Recognition Using Neural Network**

Key Skills: Python MySQL Flask HTML CSS

- 1. Built a character recognition model using neural network to recognize English Handwritten Alphanumeric Characters.
- 2. Our solution using neural network achieved 86.4% accuracy rate when compared with standard dataset taken from EMNIST.
- 3. Impact: A paperless environment is created by using this method of Character Recognition.

#### Website on Educare

Key Skills: HTML CSS SQL Javascript

- 1. Built a responsive website for engineering students to study their subjects with ease by providing videos, reference books etc.
- 2. Impact: It helped students revise their subjects with ease before semester exams.

## **PUBLICATIONS / RESEARCH / WHITE PAPERS**

## Optimizing Comparisons in the Construction of Insertion Tableau for Permutations

Key Skills: C++ Visual Studio Data Structures Algorithms

Devised an improved algorithm to minimize the number of comparisons required in the construction of insertion tableau from the permutation( $\sigma$ ). The number of comparisons mainly take place in searching for a position where the next element can be inserted in the Insertion tableau. The proposed algorithm works  $\approx$  30% better than Standard RSK with Binary Search (NBS) and  $\approx$  35 % better than Fast RSK by Tiskin.

## **ACHIEVEMENTS**

- Secured AIR 2327 in GATE (CS) with 97.61 percentile in the year 2020.
- o Secured AIR 45 in JEST with 93.72 percentile in the year 2020.
- Secured 5th rank in 10th standard at school level in the year 2012.

#### ASSESSMENTS / CERTIFICATIONS

#### **Microsoft Technology Associate**

Microsoft Technology Associate in Security Fundamentals

## POSITIONS OF RESPONSIBILITY

#### **Treasurer**

**RAIT Alumni Association** 

• Organized Alumni Meet, Talks, Events for the betterment of student community.

#### **Event Head**

National Level Technical Paper Presentation

Successfully organized and led the event.

# **SEMINARS / TRAININGS / WORKSHOPS**

Oracle Certified Professional Java Programmer Institute Name: Ramrao Adik Institute of Technology

Key Skills: Java

Oracle Certified Professional Java Programmer Training

# **Security Assets for Hacking Anticipation**

Institute Name: Ramrao Adik Institute of Technology

Key Skills: Ethical Hacking

Worked on Security related tools to understand the different security threats for a system and how to use the tools to avoid them.

#### **Technical Programming Skills**

Institute Name: Ramrao Adik Institute of Technology

# PERSONAL INTERESTS / HOBBIES

- Reading fiction/non-fiction books
- Traveling
- Sketching

# **WEB LINKS**

• Github - https://github.com/shwetagodse/