Madhura Pawar B.E., Computer Engineering

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Examination	University	Institute	Year	Grade
Graduation	SPPU	Pune Institute of Computer Technology, Pune	2019	9.72 🥇
Intermediate/+2	HSC	HPT Arts & RYK Science College, Nashik	2015	84.15 %
Matriculation	SSC	Nirmala Convent High School, Nashik	2013	92.55 %

ACADEMIC ACHIEVEMENTS

- Overall **University Rank 1** in Computer Engg. across **90 colleges** of Pune University   [*2019*]
- Awarded **Dr.D.Y. Patil**, **G.H. Raisoni** and **C.A.V. Bahule Gold Medals** and **Catono P. Ramas Prize** for securing the highest marks in Computer Engineering.   [*2019*]
- Recipient of the **BMC Software Scholarship** for standing 1st in Computer Engg. Deptt.   [*2018*]
- **University Rank 9** and **Institute Rank 2** in the 3rd year of Computer Engg. Deptt.   [*2018*]
- **University Rank 1** and **Institute Rank 1** in the 2nd year of Computer Engg. Deptt.   [*2017*]
- Awarded **Late Shri. Gendalal Chordia Award** for outstanding performance in Engg. Math   [*2017*]
- Bagged **State Scholarship** for meritorious performance in Science subject in high school   [*2014*]

INDUSTRY EXPERIENCE

Software Engineer | KlearStack   *Pune, India*
AI driven OCR and Intelligent Data Extraction Software   *June 2021 - July 2022*

- Developed back-end module for extracting information from handwritten mandate forms to validate their authenticity. Witnessed a volume of **2000** mandate forms per day being processed seamlessly.
- Implementing heuristic generalized algorithms for **template-less data extraction** from invoices using a cross-functional framework of Python, Django, OpenCV, spaCy and MongoDB.
- Setting up auto-language detection and translation pipeline to provide **multi-lingual** invoice support.

Technnology Analyst | Credit Suisse   *Pune, India*
Full Stack Developer in the Group Chief Technology Officer   *June 2019 - May 2021*

- Predictive Modeling of Service Requests
  - Built a web-app predicting the closing date of incoming service requests, facilitating key business decisions to reduce the breach count of requests raised by different stakeholders.
  - Analysing and training a variety of predictive models post data cleaning and preprocessing. Developing REST APIs in **Flask Python** for the web-app.
- Service & Test Maturity Assessment Application
  - Developed the client-side module using ReactJS, Java Spring Boot and Flask Python & Impala for database querying where a service owner assesses his service based on pre-defined metrics.
  - Enhanced visualisation for users with informative charts and graphs.

Smart Business Continuity Application | BMC Software   *Pune, India*
Sponsored Project by BMC Software, Inc   *July 2018 - May 2019*

- Designed and built an application which initiates **Business Continuity** and **Disaster Recovery** in case of organisational failure due to a natural disaster.
- Furnished **real time status** of dependencies such as assets, employees, services & project impact status
- Reported the findings in a research paper in 'The International Journal of Innovative Research in Science, Engineering and Technology', ISSN: 2319-8753.

Doot - You Seek, We Provide   *Pune, India*
Participant Project for the WiT (Women In Technology) sponsored IBM's Hackathon   *May 2020*

- Designed a location-based **connecting platform** for NGOs, donors and the help seekers.
- Front end in **ReactJS**, **Java Spring Boot** as backend & IBM's H2 Database for maintaining data.

Academic Projects

Classification of Plant Diseases using Neural Networks   *Seminar & Technical Communication*
Convolutional Neural Networks for Image Processing   *Jan 2018 - Mar 2018*
- Designed a CNN model which classifies the disease a specific crop is infected given the image of the leaf
- Achieved an overall accuracy of **98.6%** in classifying a leaf into 4 categories: 2 healthy and 2 diseased

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Realtime Vision Descriptor   *Smart India Hackathon*
National finalist (top 8) by the Ministry of Social Justice & Empowerment, Govt of India.   *March 2019*
- Built a system that describes the situation captured by mobile camera lens in natural language and performs primitive tasks over voice commands.
- Used Recurrent Neural Networks, LSTMs, and fine-tuned Google's Inception model on the Flickr30k Dataset using Tensorflow.

Book Locator Application   *Skills Development Lab*
Android based Application   *July 2017 - December 2017*
- Developed a **real-time utility app** to help a user locate a book without manually searching for it
- The user can navigate through around **3502 library books** categorically arranged in 19 subsections

Exam Cell Automation Application   *Web Technology*
A web-application   *Dec 2017 - Feb 2018*
- Built a web app which automates the manual work of assigning specifc set of roll numbers to a particular block , assigns supervisor dynamically using JavaScript , PHP and MySQL

Technical Skills

- **Programming Languages**   Python, Java, ReactJS, JavaScript, HTML/CSS, PHP
- **Frameworks & Libraries**   Django, Flask, Spring Boot, OpenCV, Scikit-learn, TensorFlow
- **Databases**   MongoDB, MySQL, Impala, Oracle

Positions of Responsibility

Treasurer & Content Writer, National Service Scheme, PICT   *Mar 2018 - Mar 2019*
Student-volunteer body of PICT
- Managed funding & expenditure of the NSS activities; Raised funds towards Kerala flood rehabilitation
- Started an online campaign '**Deed of the Week**' bringing to light the stories of people doing kind acts

Volunteer, National Service Scheme, PICT   *Apr 2017 - Mar 2018*
- Ideated and led the **Awareness drive on Malaria & Dengue** in slums near Parvati hill, Pune
- Organised an event **thanking police** officers and distributed 150 letters for ensuring citizen safety

Notable Coursework

Data Analytics	Artificial Intelligence & Robotics	Data Mining & Warehousing
Advanced Data Structures	Design & Analysis of Algorithms	Software Modeling & Design
Neural Networks & Deep Learning[†]	Convolutional Neural Networks[†]	Sequence Models[†]
Structuring ML Projects[†]	Software Engg. & Project Mgmt.	Web Technology

[†]: Completed on Coursera, certifications available here

Extra Curricular Activities

- Secured **3**[rd] position in the **Innovative Idea for Smart Village Development** competition   [*2018*] sponsored by Department of NSS, Pune University and IEEE Bombay Section
- Scripted, directed & acted in a play for the **Diversity & Inclusion** event by Credit Suisse to   [*2019*] spread awareness about generational diversity.
- Secured **Special Mention** in thINK competition, Socio-Art competition by NSS IIT Bombay.   [*2020*]
- Bagged **2**[nd] prize in The Artistic Impact, Socio-Art competition by NSS IIT Bombay.   [*2017*]