MELNITA DABRE

https://github.com/Melnita| mdabre@umass.edu | +1 (413) 379-8002 | www.linkedin.com/in/melnita-dabre

EDUCATION

University of Massachusetts, Amherst, USA **Exp grad 2022**
Masters of Science in Computer Science **(CGPA: 3.7/4)**
Relevant Coursework: Advanced Natural Language Processing, Intelligent Visual Computing
Independent Study: Injecting common sense reasoning into Machine Learning Models

Fr. Conceicao Rodrigues College of Engineering, Mumbai, India **Jun 2017**
Bachelor of Engineering in Information Technology **(CGPA: 3.6/4)**
Relevant Coursework: Statistics and Calculus, Big Data Analytics, Data Mining and BI, Artificial Intelligence, Data Structures and Algorithm Analysis, Advanced Database Management Systems

SKILLS

- Languages & Technologies: C++, Python, MySQL, JavaScript, Django, PyTorch
- Analytics and Automation Tools: Microsoft Excel, Tableau, Automation Anywhere

PROFESSIONAL EXPERIENCE

Anmol Computech, Mumbai, India **Sep 2019 - Jul 2020**
Software Developer
- Developed an in-house Business Process Management tool capable of modeling dynamic business rules, implemented as a rich interactive web application using JSP and jQuery.
- Implemented various Continuous Improvement initiatives such as automating client onboarding workflows like KYC using Python scripts deployed on AWS.

ZS Associates, Pune, India **Jul 2017 - Aug 2019**
Associate
- Developed high-level Python API to automate a proprietary SQL based ETL Tool.
- Structured sales force bonus payout plans for over 30 markets spanning across APAC and EEMEA.
- Performed information-driven diagnostic examination to help clients assess incentive compensation and promote sales force effectiveness.
- Onboarded key client markets in the project with annual revenue potential of over $ 100,000.
- Implemented forecasting models such as Autoregressive Integrated Moving Average, ADDWINTERS, etc. to predict sales data.

Hewlett Packard, Mumbai, India **Jun 2016 - Jul 2016**
Datawarehouse Intern
- Developed Business Intelligence reports on basic key performance indicators like growth rate utilized for operational analysis by client - Bank of India.
- Designed analytical dashboards in SAP BO – Web Intelligence for basic performance and positional analysis.

The Apprentice Project, India **Oct 2018 – Jan 2021**
Coding Teacher/Mentor
- Teaches basic programming constructs using MIT Scratch to underprivileged students.
- Designs lesson plans for all classes.
- Mentored a group of students who won the TAP Hackathon 2018 conducted in Pune.

PROJECTS

Sentimental Visual Question Answering (NLP)
- Designed a method to combine LSTM and feature-rich encodings from state-of-the-art models like LXMERT that outperformed vanilla LSTM and a few other multitask models for Sentimental visual question answering.
- Created a dataset with affective answers for open-ended questions using a preexisting captioning dataset.

Home Automation System using Artificial Intelligence
- Prototyped a Home Automation system consisting of an array of relay switches and other hardware components.
- Implemented NLP to enable wireless control of the system through voice commands.
- Technologies used: Raspberry Pi, Arduino, Jasper
- Published a paper on the same in 'International Journal for Research in Applied Science and Engineering Technology (IJRASET)' in August, 2017. ISSN No 2321-9653. Volume No 5, Issue VIII.

ACHIEVEMENTS AND ACTIVITIES

- Won the 'Best User Interface' at ZS Quest Hackathon '17 for creating an interactive prototype for the personalized analytics application for sales representatives.
- Received 'Opscars' Award for excellence in project setup and operations for the project 'Emerging Markets Sales Incentive Program (EMSIP)'.
- Obtained a certificate of appreciation for valuable contribution to EMSIP project.
- Participated as Team Captain and ranked 18th among 110 colleges and universities in 'ABU Robocon 2017'. Designed a disc throwing robot in 7 spots with different heights and areas using OpenCV and MOSSE track algorithm.