

Shantanu Deshmukh

RESEARCH ASSISTANT · GRADUATE STUDENT · SAN JOSE STATE UNIVERSITY · 754 THE ALAMEDA, SAN JOSE, CA - 95126

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Skills

Languages: Python, Java, Haskell

Database: MySQL, MongoDB, DynamoDB

Cloud: Amazon AWS, Google GCP

Machine Learning: TensorFlow, Keras, scikit-learn, numpy, pandas, nltk

Web: JavaScript, Angular, Bootstrap, Materialize, jQuery, d3.js, css, node.js

Tools & IDEs: Android SDK, GitHub, Eclipse, Jenkins, JIRA

Research Papers

Machine Learning for Classification of Inhibitors of Hepatic Drug Transporters

IEEE 17TH INTERNATIONAL CONFERENCE ON MACHINE LEARNING AND APPLICATIONS (ICMLA 2018)

In Press

Orlando, FL

PediatricDB: Data Analytics Platform for Pediatric Healthcare

IEEE 13TH INTERNATIONAL CONFERENCE ON DIGITAL INFORMATION MANAGEMENT (ICDIM 2018)

In Press

Berlin, Germany

Work Experience

AcuityAI Stanford Startup

COMPUTER VISION AND MACHINE LEARNING INTERN

Palo Alto, CA

June 2018 - PRESENT

- Improved image detection accuracy by hyper-parameter optimization on different models like ResNet, VGG, MobileNet, Inception, etc. and modifying existing layers/models as per the use case
- Extracted, transformed and cleaned large dataset on Linux based cloud machines to train AI models
- Performed supervised learning with feature extraction and principal component analysis for feature reduction

San Jose State University

RESEARCH ASSISTANT

San Jose, CA

Jan. 2018 - PRESENT

- Used machine learning to classify inhibitors of hepatic drug transporter's SMILES strings
- Applied traditional machine learning techniques(SVM, random forest) and compared the results with deep learning models(RNNs, LSTM)
- Converted unstructured medical text to a structured format using Natural Language Processing and exposed it using MEAN Stack on Google Cloud
- Awarded funds by the SJSU College of Science Research, Scholarship, and Creative Activity (RSCA) grant

Deloitte Consulting LLP

BUSINESS TECHNOLOGY ANALYST (DELOITTE DIGITAL)

Mumbai, India

Nov. 2015 - Aug. 2017

- Evaluated as a top performer for implementing multiple business modules in Java, overcoming obstacles, and ensuring timely delivery working under an agile development model
- Helped in architectural design of large-scale projects considering trade offs and effectively communicating across the team and the client
- Created a distributed data processing engine using Apache Storm and Apache Kafka, as a Firm initiative to be proposed to a prospective client
- Awarded SAP Hybris Commerce development professional certificate

Accenture Services Pvt. Ltd

SOFTWARE ENGINEER

Hyderabad, India

Aug. 2013 - Oct. 2015

- Designed and developed multiple use cases in Java along with their jUnits satisfying user requirements
- Created a XML based automated testing framework, to test REST services, saving around 40% of the previous testing effort
- Awarded ACE(Accenture Celebrates Excellence) award for effective team-work and successfully delivering a high risk project

Academic Projects

Obstacle Detection to help Visually Impaired (GuideApp - Android Application)

TENSORFLOW, PYTHON, ANDROID SDK

San Jose, CA

Dec. 2017

- Created an application to alert visually impaired by detecting obstacles on the street by training a MobileNet model to get an accuracy of 93%

Automated Solar Panel installation layout generation using Object + Edge detection

TENSORFLOW (MOBILENET), PYTHON, EDGE DETECTION ALGORITHMS

San Jose, CA

Feb. 2018

- Detected obstacles on roof, followed by edge detection on each of the detected bounding boxes, to get the obstacle boundaries

Text Scrapper and Classifier

PYTHON, KNN ALGORITHM, K-MEANS ALGORITHM, TF-IDF

San Jose, CA

Sept. 2017

- Built a scrapper to scrap jobs listings followed by tf-idf vectorization and k-NN to find the top matched jobs and grouped them using Lloyd's algorithm

Education

San Jose State University

M.S. IN COMPUTER SCIENCE (GPA 4.0)

San Jose, CA

Aug. 2017 - Exp. May. 2019

- Awarded a **Scholarship** for Outstanding Academic Achievements

KJ Somaiya Institute of Engineering and Information Technology

B.E. IN COMPUTER ENGINEERING

Mumbai, India

July. 2009 - May. 2013