

# SARANG JOSHI

Full Stack Engineer/Machine Learning Engineer

## CONTACTS

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# PROFILE

Software engineer with proficiency in computer science and engineering. 5 years of research experience. 3 years of industry experience.

#### **EDUCATION**

Master's, Virginia Polytechnic Institute and State University, Blacksburg, GPA 3.56

DECEMBER 2018

Master's, Virginia Polytechnic Institute and State University, Blacksburg, GPA 3.82

AUGUST 2020

## DATA & MACHINE LEARNING PROJECTS

#### Epicaster 3.0: Forecast the epidemic explorer

- Developed REST API's in Java for an Accuweather plugin to handle simulation snapshots for flu forecasts.
- Video URL

## Visualize Keratoconus: A Computer Vision Project

- Developed an algorithm using OpenCV to generate synthetic images to simulate keratoconus vision
- Github repo
- Sample image

#### IMDB movie rating prediction

- A movie rating prediction system to predict the IMDB rating of a movie on IMDB movies dataset with 18 features.
- MSE of 0.5 for movie rating using a RandomForestRegressor and Grid search for hyperparameter tuning.
- Github repo

## FULL STACK SOFTWARE ENGG. PROJECTS

#### Interactive online web search interface: Critisearch

- Developed an online search interface using AngularJS to manually reorganize online search results.
- Conducted user studies and gathered interaction data to understand user behavior patterns.
- Demo Video

## Menu Redefined: A WYSIWYG online menu card

- A CMS enabled Express.js website to "see" the menu before placing an order.
- Click on a menu item to watch how it is made.

• Website Demo

# INTERNSHIPS

## Full stack engineer, Ellucian, Reston, VA

MAY 2020 - AUGUST 2020

- Developed a microservice for appointment scheduling for university systems
- Developed REST API endpoints for appointment scheduling
- Developed a lightweight utility to log incoming API requests and export to CSV
- Tech stack ReactJS, Node.js (Express), MongoDB

#### **EMPLOYMENT HISTORY**

## Software Engineer, Accenture, Pune, India

DECEMBER 2009 - MARCH 2013

- Developed and maintained the database model for a repository to aggregate customer data from online surveys.
- Configured, installed and tuned client system for performance in Oracle databases and improved retrieval performance by 23%.

#### Software Specialist, Yardi Systems, Pune, India

APRIL 2011 - FEBRUARY 2013

• Debugging and root cause analysis of problems by reviewing configuration files and logs.

#### LINKS

Personal Website Github LinkedIn

## SKILLS

Python (Django)	Java (J2EE)
Node.js	AngularJS
Databases (Oracle, MySQL, PostgreSQL)	Machine Learning (scikit-learn, Tensorflow)
Computer Vision (OpenCV)	Git
Docker	Jenkins

## **PUBLICATIONS**

Scalable Translation Validation of Unverified Legacy OS Code.

JULY 2019

• FMCAD2019, Formal Methods in Computer-Aided Design

# Four considerations for supporting visual analysis in display ecologies

MAY 2015

• IEEE Visual Analytics Science and Technology