# Vedant Vohra

**(**331) 245 - 9385

#### **EDUCATION**

## University of Houston

Master of Science in Computer Science

Aug 2021 - (Expected) May 2023

Houston, TX

# Keshay Memorial Institute of Technology (affiliated to JNTUH)

Bachelor of Technology in Computer Science and Engineering

Sept 2014 - May 2018

Hyderabad, TS, India

#### RELEVANT COURSEWORK

• Data Structures & Algorithms

- Cloud Computing
- Machine Learning
- Computer Vision
- Big Data Analytics

#### EXPERIENCE

Slalom Build

June 2022 - Aug 2022

Software Engineer Intern

Houston, TX

## Responsibilities:

- Worked with a team on the Meaningful Work project.
- Redesigned the architecture to accommodate post-MVP features.
- Presented at the monthly Architecture Collaboration meeting.

#### Projects:

- Meaningful Work Feedback API Typescript, NodeJS, DynamoDB, Lex, Lambda, SQS, EventBridge, CloudFormation
- A Slack chatbot app and backend serverless API for asking Slalom employees for feedback on their work.
- The API supports 3 different question types, multiple journeys and scheduled or ad-hoc feedback.
- The Data collected by the API is used to calculate the Happiness Index of the employees, which is used by company leadership to make decisions to help boost employee satisfaction.

Darwinbox

Mar 2018 - Oct 2020

Hyderabad, TS, India

Senior Software Engineer

#### Responsibilities:

- Reported directly to the CTO
- Owned multiple modules and handled all deliverables within those modules
- Led a team of Software Engineers across the multiple modules
- Researched, designed, and implemented Scalable Software Architecture
- Participated in Microservice Architecture and Design discussions
- Did Code Reviews and conducted Review Meetings
- Strengthened the application's security as the lead developer in the AppSec team
- Led the R&D team
- Mentored interns, assigned and tracked tasks, and conducted training
- Owned the product's flagship module, 'PMS'. Handled production issues, implemented new features and enhancements.
- Planned and carried out platform optimization sprints. Conducted code reviews for optimization

#### Projects:

- Reports module Led a team of developers working on building a performant, service-oriented framework for processing and generating realtime reports. — NodeJS, MongoDB, Redis, Angular, SQS, S3, ElasticSearch
- Analytics module Built a reliable data pipeline to channel and process data from all modules in the application. Designed and built a modular and highly scalable backend framework to deliver data on demand to a powerful visual analytics engine. — Yii, NodeJS, MongoDB, Angular, SQS
- Application Security Worked with internal and external stakeholders to identify, review, and patch varying levels of vulnerabilities. Worked with DevSecOps to establish security best practices for the whole development team. Addressed client concerns with respect to Application Security and Compliance.

- PMS module Owned the PMS (Performance Management System) module. Was responsible for all development within the module PHP (Yii), JQuery, MongoDB, MySQL, Redis, ElasticSearch, S3
- Face Recognition Service A contactless biometric attendance system built on top of AWS services. Built an API to easily integrate face recognition into any module in the application. Researched various Liveness Detection methods and worked on a prototype for an Anti- Spoofing System using Chromatic Shift, Texture-Based and Optical Flow Analysis NodeJS, Lambda, MongoDB, DynamoDB, Rekognition, S3, Python, Keras, OpenCV, NumPy
- ID Document and Receipt Parser Worked alongside an external resource on an OCR-based engine to scan and parse relevant data from ID documents such as driver's licenses and from various types of receipts and invoices. Built it as a scalable microservice with 2 components, Training and Parsing. Python, R (Shiny), Tensorflow, Tesseract

Darwinbox
Intern

Jan 2018 – Mar 2018
Hyderabad, TS, India

#### Projects:

- Voicebot An intelligent assistant built into the Darwinbox Android app. Researched and compared multiple chatbot engines. Built a lightweight API server with extremely high throughput to act as a middleware between the application backend and the wit.ai NLU service, along with a DialogFlow-backed conversation engine. Also built a framework to use training data generated by wit.ai to train a custom intent classification model using the RASA NLU library Go, Python, NLTK, RASA NLU pipeline
- Web Crawler and Scraper based on js-crawler to feed training data to the Voicebot NodeJS, JQuery, webpack
- **ProfanityFilter** A profanity filter and sentiment analyzer for employee feedback built on the Sentiment Classification using Word Sense Disambiguation concept and the SentiWordNet dataset *Python*, *NLTK*, *SciKit-Learn*
- OCR Worked as part of a team on a basic OCR engine to power a receipt parser. Python, OpenCV, Tesseract
- Event registration form for Dialog on Tech event and email template for Blog  $HTML5,\ CSS3,\ JQuery$

 GGK Tech
 Oct 2017 – Dec 2017

 Intern
 Hyderabad, TS, India

 $\bullet$  Underwent training in C# and . NET development at production scale.

#### **PROJECTS**

### Gumo Z | NodeJS, MongoDB, Elasticsearch, Neo4J

• A web-crawler and scraper to extract data from a family of nested dynamic web pages, with added enhancements to assist knowledge mining applications.

# SmartCities-Project-1 🗷 | Python, OpenCV, Tensorflow, P-DESTRE dataset

• UAV Tracking for Smart Cities - Pedestrian detection, re-identification and tracking using a UAV. Trained on the P-DESTRE dataset.

#### Camera-based Heart Rate Measurement in the Cloud Z | Python, OpenCV, AWS

• Heart rate estimation using a webcam. Scaled up for multiple simultaneous measurements using cloud technologies.

## **SKILLS**

Java, NodeJS, Python, PHP, JQuery, Angular, Typescript, C#, MongoDB, SQL, Neo4J, ElasticSearch, Redis, Jest, Microservice Architecture, AWS, Linux, GIT, Docker, Machine Learning, Deep Learning, NLP, NLU, Computer Vision, Tensorflow, Blockchain, JIRA project management

#### **PUBLICATIONS**

# A Glimpse Under the Hood of Face Recognition at Darwinbox ✓

20th November, 2020

Tech@Darwinbox

A walkthrough of the implementation of Face Recognition in the Darwinbox mobile application

#### **ACTIVITIES**

KMIT AI Club 2017-2018

Student Mentor

Helped organize discussion sessions and activities for the AI club.