# Dwarkanath Prabhu

Software engineer with experience in agile software development, leadership and startups

## **Contact:**

**dwarkanath.com** 

O pdwarkanath

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**♀** Toronto, ON

Authorized to work in Canada indefinitely as a Permanent Resident

# **Technical Skills:**

- Python ★★★★ 4.5/5
- JavaScript ★★★★ 4/5
- SQL ★★★★ 4/5
- HTML ★★★★ 4/5
- CSS ★★★★ 4/5
- ASP.NET ★★★ 3.5/5
- Java ★★★ 3/5
- PHP ★★★ 3/5
- AWS ★★★ 3/5
- GCP ★★★ 3/5

# **Certifications:**

- AWS Certified Cloud Practioner
- Full Stack Open University of Helsinki
- Google IT Support Specialist
- Coursera Deep Learning Specialization

# **Soft Skills:**

- Writing ★★★★ 4/5
- Teamwork ★★★★ 4/5
- Public Speaking ★★★ 3.5/5
- Leadership ★★★ 3.5/5

## **Interests:**

- Memes ★★★★ 5/7
- Standup Comedy
- Digital Marketing
- Linguistics

# **Work Experience**

## Software Engineer II (SDE-2), WorkSpan

WorkSpan is a SaaS platform for companies to build and manage joint sales partnerships **Co-Sell with Google** 

- Led the development of Co-Sell with Google enabling customers to share sales leads with Google Partner Advantage Portal (PAP)
- Developed a subscription in GCP to receive leads from Google PAP pub/sub topic and share with customers
- Implemented SSO login in Angular allowing customers to use their preferred identity provider for authentication
- Onboarded 10 customers facilitating the sharing of over \$1.5 billion worth of leads

## Co-Sell with AWS API

- Led the transformation from an S3-based data exchange system to a real-time API-based system for submitting sales leads to AWS, improving efficiency for 70 customers
- Designed and implemented a secure architecture using IAM roles, STS, Lambda functions, and EventBridge, reducing data processing time from 30 minutes to 6
- · Managed the entire project lifecycle, ensuring a seamless migration for all customers

#### **Internal Python Automation Scripts**

- Product configuration installations for new customers
- Identify and delete duplicate objects from DataStore (GCP NoSQL database)
- Make hitherto single person accessible files company wide accessible
- Daily and weekly error reports from trace logs in BigQuery
- Post error messages to each product's respective slack channels for customer service teams to monitor

## Software Engineer, Conference Management Services (CMS) Inc.

Oct 2019 - Jan 2022

Mar 2022 - Present

CMS Inc. is an event management company specializing in academic conferences

#### **Virtual Conference Platform**

- Spearheaded the execution of two virtual conferences, each hosting 15,000 attendees, from concept to completion
- Architected and built an application for on-demand access to paper presentation videos used by over 100,000 users
- Developed a web application for users to register and upload presentation videos to an AWS S3 Bucket
- Automated Zoom Meetings creation using Zoom API for live sessions with access limited to authorized participants

#### **Sponsor Registration System**

- Created customized sponsor registration systems in ASP.NET with a SQL Server database for 10+ conferences
- Designed an intuitive booth selection interface using CSS Grid
- Developed a secure payment system using Authorize. Net for credit card transactions

## Paper Management System

- Refactored legacy PHP code into Python for efficient reviewer assignment
- Led the development of the API enabling paper authors to submit copyright to IEEE
- Implemented a robust full-text search functionality for papers through a PHP-based API with AJAX calls
- Automated creation of post-conference proceedings using a Flask app served via nginx on Debian

## Research Assistant, Texas A&M University

Skin Cancer Detection Using Deep Learning (Computer Vision)

Sep 2017 - Oct 2019

- Analyzed a labeled dataset of 10,000+ skin images to classify into 7 types of diseases
- Achieved validation set multi-class precision of 87.5% a 25% improvement over baseline by using ResNet50 (pretrained on ImageNet), Data Augmentation and Weighted Loss to fix class imbalance

## Power Generation Capacity Planning – Conference Paper (Optimization)

- Modeled and solved a bi-objective optimization problem using linear programming to minimize water utilization and cost for power generation in Texas with CPLEX in C++ over the next 25 years
- Built an app using Shiny framework for R and GIS data to display optimal solutions on a map

## Marketing Manager, Aasaanjobs.com

Jan 2015 – Jan 2016

Aasaanjobs.com (now Rocket) is a job portal for entry-level jobs in India

Hired and managed a team of 10 including copywriters, designers, editors and digital marketers

## Strategy & Operations Analyst, Deloitte

Deloitte is one of the largest consulting firms in the world.

Jul 2012 – Dec 2014

## **Projects**

## ProductAnimal.com (React App)

Oct 2020 – Nov 2020

- Created a React app to generate a startup name using the formula ProductName + Animal (eg. mailchimp)
- Deployed a Node.js function to AWS Lambda as an API to check if .com domain is available to register for the name

## Week In Memes (Static Website)

Feb 2019 – Mar 2020

Week In Memes is a blog that maintains a record of all Indian meme templates as they are generated and used

- Wrote 100+ articles in 1 year using a Python script that scrapes Twitter for memes on trending topics
- Designed a custom CSS theme for Hugo (Golang based static site generator) to publish the blog
- Devised Python scripts for automation of social media posting to Twitter and Pinterest saving time by 80%
  Grew to 12,000+ visitors/month using Search Engine Optimization, Email Marketing and Social Media at no cost

# **Education**

M. Eng., Industrial Engineering, Texas A&M University
B.Tech., Mechanical Engineering, Indian Institute of Technology Bombay