## SHASHANKA PRAJAPATI

### **Senior Machine Learning Engineer**

I am a highly efficient Python Developer with skills honed over 4 years of experience. I have good communication skills that have come in handy when dealing with clients and leading a good team.

## **Education**

### Siddaganga Institute Of Technology **Bachelor Of Engineering In Computer Science**

Karnataka, India August 2013 - June 2017

CGPA: 8.91

# **Work Experiences**

#### **Fusemachines**

Senior Machine Learning Engineer

Kathmandu, Nepal February 2021 - Present

- Co-Team Lead in a team of 7 on a Time-Series Forecasting project as a Consultant for a video game company, to forecast and optimize revenue through promotion planning
- Team Lead in a team of 3 on a Supervised Learning project as a Consultant for a hospital to predict knee implants based on patient demographics
- Assistant Manager in Al Services, to monitor ML Engineers working on client projects on the company's behalf
- Automated the workflow and saved developers over two hours per day
- Analyzed over 23k surgery cases to build Regression and Classification Models that can predict knee implant sizes with over 90% accuracy
- Oversaw supervisory assignments for around 50 developers in the AI Services Department
- Allocated ML Engineers to client projects by matching requirements with developer skills

### **Machine Learning Engineer**

January 2019 - January 2021

- Team Lead in a team of 4 on recommendation and question ranking features in
- Team Lead in a team of 3 on a Computer Vision project to extract tabular data from PDFs as a Consultant for a company that provides data transformation services
- Recommended resources to read on getting a question wrong on a learning platform to help students improve
- Implemented a novel approach for extracting data from borderless tables
- Researched Python standardization and conducted a session with over 100 participants that resulted in company-wide improvements

#### Software Engineer

May 2018 - December 2018

- Consultant Developer on a Computer Vision project for an AI based medical company to estimate a fit for 3D models of knees onto knee X-Rays
- Implemented edge detection algorithms to register 2D projection of 3D bone models onto edges of an X-Ray in order to estimate the bone size
- Reduced best-fit search time from several hours to just a few minutes by employing derivative-free non-convex algorithms, code optimizations, and vectorization

### Integrated ICT / Semantro

Management

Lalitpur, Nepal

Intern

December 2017 - May 2018

## Contacts

Red Cross Marg Kathmandu, Nepal

+977 9818859888

1 shashankap0303@gmail.com

sp-95

in shashanka-prajapati

# Languages

Python JavaScript

TypeScript Scala

## Skills

Automation

Agile Development

Machine Learning

Computer Vision NLP

OOPS

**Search Optimization** 

## **Tools**

Scikit Learn Pandas

Numpy Seaborn

Airflow ElasticSearch

Flask Sphinx

Amazon S3 React

Tailwind CSS

Next.is

• Implemented a transliteration based Bilingual Search Service for Inventory

# **Projects**

# Sales Prediction Using Time-Series Forecasting

Co-Team Lead

August 2021 - Present

- Forecast game sales and optimize revenue through promotion planning
- Tools: Airflow, Amazon S3

# **Knee Transplant Size Estimation Via Patient Demographics**

Team Lead

December 2020 - June 2021

- Predict implant sizes to optimize pre-surgery inventory management thereby reducing expenses
- Tools: Scikit Learn, Seaborn, Amazon Sagemaker

### **Standardization Of Python Projects**

Lead Developer

October 2020 - November 2020

- Research Python best practices to bring about a company-wide reform
- Tools: Poetry, Pre-Commit, Fire, Loguru, Dynaconf, Tox, Sphinx, GitHub Actions, GitHub Pages

### **Question Difficulty Estimation**

Team Lead

July 2020 - September 2020

- Classify question difficulty to bring uniformity in quizes
- Tools: ElasticSearch, NLP, Amazon SQS, Flask

### **Resource Recommendation System**

**Team Lead** 

April 2020 - September 2020

- Recommended resources to read on getting a question wrong on a learning platform to help students improve
- Tools: ElasticSearch, NLP, Amazon SQS, Flask

#### **PDF Table Extraction**

**Lead Developer** 

September 2019 - April 2020

- Extract tabular data from PDFs of scientific papers for data compilation
- Tools: Detectron2, Camelot, PDFMiner

# Knee Transplant Size Estimation Via Medical Imaging Techniques

Developer

July 2018 - September 2019

- Predict implant sizes to optimize pre-surgery inventory management thereby reducing expenses
- Tools: Kabsch, NLOpt, Scikit Learn

### **Bilingual Inventory Management**

Developer

December 2017 - May 2018

- A transliteration based search mechanism with support for Nepali and English to optimize local store inventory management
- Tools: Lucene, NLP, Scala, Maven

### **Sentiment Analysis**

Developer

September 2016 - March 2017

- Sentiment Analysis on Amazon reviews
- · Tools: NLP

### **Undergraduate Major Project: Voice**

#### **Assistant**

Developer

September 2016 - March 2017

- A simple interactive personal assistant for Linux distributions
- Tools: NLP

### **Blogging Website**

Developer

June 2016 - July 2016

• A simple blogging web app powered by Ruby on Rails

# Undergraduate Mini Project: Online Examination System

Developer

February 2016 - June 2016

 A web application for online examination with Multiple Choice Questions

## **Certificates**

### First Nepal Winter School In Al

NAAMII

December 2018

CSMM.101x: Artificial Intelligence (AI)

ColumbiaX

May 2018