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Summary

"Committed to code applications to enhance millions of lives worldwide"

Before proceeding further about me, I would love myself to be introduced as a devotee to all things modern technology. I believe in constant learning and spontaneous absorption of technical skills. Throughout all these years I've grasped more than 14 programming languages and counting, more than 5 database system and counting. I am greatly endeavoured to get to know about the Deep Reinforcement Learning and Machine Learning models, in which I am currently working on. I think, these areas are the most important things modern technology has ever produced.

In the field of programming and computer sciences I have learnt that, there should be no fear in the mind of breaking features in order to test and innovate newer features. So, this game of creating and breaking things that I create is what keeps me going forward in this ever-changing world of computing.

When I first started learning about developing accelerated hardware based applications, at first I thought it would be quite difficult to achieve, because these programs are going to be computationally complex and resource hungry as well. But, I keep my calm and learnt the full development process and become an expert.

I recently started a new software research institute under my company, PositionX Research Division, where I, along with my fellow other collaborators research on different advanced application development techniques. Such as, at the lab, I am currently working on a Cloud-Only Operating System based on Services, which we call, CO-OSBS, which I am sure in future will be able to run on applications without having to install them, eventually replacing physical memory modules.

Experience



Subject Matter Expert, Reinforcement Learning and Advanced AI

White Panda

Dec 2019 - Present (10 months +)



Founder and Engineering Lead

PositionX Machines Research

Sep 2019 - Present (1 year 1 month +)



Certified Partner and Specialist in Watson AI

IBM

Aug 2018 - Present (2 years 2 months +)



Senior Software Engineer

Microsoft

May 2017 - Jun 2019 (2 years 2 months)

Education



Udacity

Deep Reinforcement Learning Nanodegree, Artificial Intelligence

2020 - 2020

1. I mastered the fundamentals of reinforcement learning by writing my own implementations of many classical solution methods.
2. I applied deep learning architectures to reinforcement learning tasks. I trained my own agents that navigates a virtual world from sensory data using Unity ML Agents.
3. I learnt the theory behind evolutionary algorithms and policy-gradient methods. I also designed my own algorithm to train a simulated robotic arm to reach target locations.
4. I learnt how to apply reinforcement learning methods to applications that involve multiple, interacting agents. These techniques are used in a variety of applications, such as the coordination of autonomous vehicles.



Udacity

Machine Learning Engineer Nanodegree, Machine Learning

2020 - 2020

- Build a Python Package: I Wrote a Python package on my own using software engineering best practices for writing production level code. This project was optional and was not be graded.
- Deploy a Sentiment Analysis Model: Using SageMaker, deployed my own PyTorch sentiment analysis model, which is trained to recognize the sentiment of movie reviews (positive or negative).
- Plagiarism Detector: Engineered features that can help identify cases of plagiarism in text and deployed a trained plagiarism detection model using Amazon SageMaker.
- Capstone Project & Proposal: I created a model that can efficiently identify types of pneumonia one has by using the X-Ray data.



Udacity

Data Engineering Nanodegree, Data Engineering and Data Science

2020 - 2020



Udacity

Intel Edge AI For IOT Developers Nanodegree, Artificial Intelligence and Internet of Things

2020 - 2020

PROJECT 1: DEPLOYING PEOPLE COUNTER : github.com/swastiknath/iot_ud_1

Investigated different pre-trained models for person detection, and detect the number of people in the frame, and the time spent there.

PROJECT 2 : DESIGN A SMART QUEUING SYSTEM : github.com/swastiknath/iot_ud_2

Built custom queuing systems for the retail, manufacturing and transportation sectors and used the Intel® DevCloud for the Edge to test your solutions performance.

PROJECT 3 : BUILD A COMPUTER POINTER CONTROLLER: [gtihub.com/swastiknath/iot_ud_3](https://github.com/swastiknath/iot_ud_3)

Used models available in the OpenVINO™ toolkit to control computer pointer using eye gaze.



Indian Institute of Technology, Roorkee

Data Engineering With Hadoop and Spark, Big Data Engineering

2019 - 2020

The Electronics & ICT Academy program is sponsored by the Ministry of Electronics and Information Technology, Govt. of India.

The E&ICT Academy IIT Roorkee conducts short courses/FDPs in the emerging areas to enrich & upgrade subject knowledge and technical skills benefiting faculty, working professionals and Govt. employees.

The trained beneficiaries are expected to create a cascading effect, transforming the competencies and standards in the parent institutes/organizations.



Udacity

Computer Vision Nanodegree, Computer Vision, Artificial Intelligence

2020 - 2020



Udacity

React Nanodegree, Application Development, Desktop, Web and Mobile

2020 - 2020

Licenses & Certifications



Oracle Certified Master, Java EE 6 Enterprise Architect - Oracle

SJK004855S



Microsoft Certified Technology Specialist: .NET Framework 3.5, Windows Communication Fnd Applications (MCTS) - Microsoft

MS-8488-SUD



Certified Android App Developer - Manipal Global Education Services

Roll No: 54928



Python For Applied Data Science - IBM

XG7WBWZ6YDLQ



Machine Learning With Python - IBM

SAEWRFV3VEDP



Databases and SQL for Data Science - IBM

K86HU22S9UBZ



Data Science Methodology - IBM

NJ5WND68AQD2



Data Visualisation with Python - IBM

466KL2HQYC9W



Open Source Tools for Data Science - IBM

4Q6E4QJN4ZQJ



Data Analysis with Python - IBM

6YTSVD6Q7H9P



Applied Data Science Capstone - IBM

AC855WS6XHWX



Data Science Orientation - IBM

6FAX67MRPDD4



API Design and Fundamentals of Google Cloud's Apigee API Platform by Google Cloud (With Honours) - Google

EJZAKK3PGSHM



Data Science Professional Certificate - IBM



API Development on Google Cloud's Apigee API Platform (with Honors) - Google

TJRJF2BZLQC5



API Security on Google Cloud's Apigee API Platform - Google

QUX55VJ3HDL6



Develop APIs with the Apigee API Platform Specialization - Coursera

NAX6AVCRZU4K



Deep Learning - IBM



Object Oriented Java Programming: Data Structures and Beyond - UC San Diego



IBM Certified Specialist - Advanced Data Science - IBM

ZKVSXGSTP45K



Fundamentals of Scalable Data Science - IBM

UH6RNFVKM5BT



Advanced Machine Learning and Signal Processing - IBM

VLTH92YB7U4S



Applied AI with DeepLearning - IBM

8RJRS7ZYPPDH



Computer Vision and Image Analysis - Microsoft

6c1f7fbc81f749f595157a6c7a555541



Intoduction to Artificial Intelligence - IBM

PDLACJRP MHHD



Building AI Powered Chatbots with Watson - IBM

RKUTJPQE53JR



Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization - deeplearning.ai

8XXYF9EMCVP6



Neural Networks and Deep Learning - deeplearning.ai

EEJA95WJUE9E



IBM Power Systems Cognitive Foundations - IBM

db547a62febe4958a9d601e936a7f50b



Structuring Machine Learning Projects - deeplearning.ai

PFSVEC5QUQB7



Convolutional Neural Networks - deeplearning.ai

UG4KG9J37CBS



Intermediate C++ - Microsoft

b45a45c2396a45f0a991637194866f37



Introduction to C++ - Microsoft

06b4672aeae7470e91e84e5fe3b7d12f



Android Development Essential Training - LinkedIn

AWXOdaYSGZyPwrQ-7vrYDvpXabzy



Android Studio Essentials Training - LinkedIn

Ae2U0btSX8WafhjKLDdCtS_DmU_f



Matlab Onramp Training - MathWorks



Intoduction to Programming with MATLAB - Vanderbilt University



Control of Mobile Robots - Georgia Institute of Technology



Sequence Models - deeplearning.ai

23S6FFJ99FL3



Deep Learning Specialization - deeplearning.ai

ZEE3DCV5JWXG



Google Cloud Platform Fundamentals: Core Infrastructure - Google

8UVJZZMT8HUH



End-to-End Machine Learning with TensorFlow on GCP - Google

JYUVL7PMYGC2



Introduction to TensorFlow for Artificial Intelligence, Machine Learning, and Deep Learning - deeplearning.ai

VP5FN97CHR55



Convolutional Neural Networks in Tensorflow - deeplearning.ai

3FG6262LQMNE



Natural Language Processing with Tensorflow - deeplearning.ai

AMUET75VKPFU



Sequences, Time Series and Prediction - deeplearning.ai

552MXLJB5D3E



TensorFlow in Practice Specialization - deeplearning.ai

K74AQ76JVFNL



Enterprise Design Thinking Practioner - IBM



Hadoop Programming - Level 1 - IBM



Understanding Android Applications Basic - Pluralsight

REP ID: 4127



Advanced C++ - Microsoft

1fe5b839d23b4c92b0a6550ce8e2137d



Parallal Computing with Dask - DataCamp

10404254



Introduction to Machine Learning With Sound - IBM



Enterprise Design Thinking - Team Essentials for AI - IBM



Working With Android Tools and Testing - Pluralsight

REP ID: 4127



Introduction to Matplotlib - DataCamp

10548097



Introduction to Graph Theory - UC San Diego

3EA2YYAJQKG2



How Google Does Machine Learning - Google

ZAYM43DC6YVK



Launching into Machine Learning - Google

ZDVE2Y2AE8XZ



Intro To Tensorflow - Google

F5LYS3HY5MHA



Feature Engineering - Google

UPE8ZX922CCT



Art and Science of Machine Learning - Google

YW7PGPA2WKHG


 **Machine Learning With Tensorflow With Google Cloud Platform Specialization** - Google
SDYKQYAJMZAQ

 **Introduction to Computer Vision Using Watson and OpenCV** - IBM
PZNLQLS22BMK

 **Getting Started with AI using IBM Watson** - IBM
NGXAK2MS2DZE


 **Building AI Applications with Watson APIs** - IBM
WCGJMWG28842

 **Applied AI Professional Certificate** - IBM
BC4AZS9UWPZ7

 **Master The Mainframe 2019 Part-3 Real World Challenge** - IBM

 **Master the Mainframe 2019 Part-2** - IBM

 **IBM MQ Developer Essentials** - IBM

 **Architecting Hybrid Cloud Infrastructure with Anthos** - Google
HZQGHBAUQPB

 **Flutter 2020 Bootcamp** - The App Brewery

 **Functions, Methods and Interfaces in Go** - University of California, Irvine Division of Continuing Education
4GZF9HTYL228

Skills

Java Developer • Android Developer • Machine Learning Expert • Software Development • Windows software development • Custom Software Development • Python Developer • Web-based Software Development • Software Development Methodologies • Blockchain