PRANSHU GUPTA

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EXPERIENCE

MICROSOFT INDIA (SOFTWARE DEVELOPMENT ENGINEER)   June 2017 – August 2019

Integral role in designing and developing modules for a Customer Data Enrichment Service, which serves the marketing personnel of Microsoft and helps them create better sales opportunities that generate higher revenue.

- Integral role in designing and developing a fault-tolerant, auto-scaling, serverless data flow orchestration layer that supports multiple data sources, processors and targets, with a **3x performance improvement and an operational cost reduction of 90%.**

MICROSOFT INDIA (SOFTWARE DEVELOPMENT INTERN)   May – June 2016

Implemented an AI powered chat bot allowing users to interact with Dynamics365 in natural language.

GREENDZINE TECHNOLOGIES, INDIA (SOFTWARE DEVELOPMENT INTERN)   May – July 2015

Implemented an algorithm to optimize order picking process at e-commerce distribution centers by computing an optimal path for the order picking vehicle, thus, reducing the manual effort.

EDUCATION

GEORGIA INSTITUTE OF TECHNOLOGY, ATLANTA   August 2019 – Present

Master of Science in Computer Science, ***Research Assistant at The SocWeb Lab (Fall 2019)***

INDIAN INSTITUTE OF TECHNOLOGY KANPUR   July 2013 – May 2017

Bachelor of Technology in Computer Science & Engineering   GPA 8/10

PROJECTS

CONTENT AWARE IMAGE COMPLETION (COMPUTER VISION)

Implemented image completion by computing offset statistics of similar patches in input image, using nearest neighbor fields and energy optimization by graph cuts. https://github.com/Pranshu258/Image_Completion

CROWD BEHAVIOR ANALYSIS (ARTIFICIAL INTELLIGENCE)

Implemented a system that detects abnormal activity from the individual trajectories in crowd movement data, thus, empowering public safety systems. https://github.com/Pranshu258/Crowd_Behavior_Analysis

ALGORITHMS INSPIRED BY NATURE (NEURAL & EVOLUTIONARY COMPUTING)

Nature is known to be the best optimizer. We can build algorithms that are inspired by nature and use them to solve critical real-world problems. Explored & reviewed such algorithms. https://arxiv.org/abs/1903.01893

SKYLINES FOR MULTICRITERIA DATA ANALYSIS (DATABASE QUERIES)

Skylines queries are used in hotel booking systems where the user wants to choose an option which is not worse than any other, based on multiple criterions. Designed and implemented an algorithm to extract representative skylines from noisy data. https://github.com/Pranshu258/RSNC/

RELEVANT COURSES   *ongoing*

Machine Learning*	Computer Graphics*	Reinforcement Learning
Deep Learning*	Computational Photography	Computer Vision

TECHNICAL SKILLS

Machine Learning, AI	PyTorch, ScikitLearn, OpenCV, OpenAI
Programing Languages	C/C++, C#, Python, PowerShell, TSQL, HTML, JavaScript, CSS
Platforms, Frameworks & Tools	Microsoft Azure, .NET Framework, Django, Angular, NodeJS

TRAINER

INTRODUCTION TO WEB DEVELOPMENT (ACA, IIT KANPUR)   15 May – 27 May 2017

Imparted training on web development with HTML, JavaScript and NodeJS to a group of 40 students