PRANSHU GUPTA

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EXPERIENCE

MICROSOFT INDIA (SOFTWARE DEVELOPMENT ENGINEER)   June 2017 – Present

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.

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

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)

Content Aware Image Completion is the task of filling the missing part of an image with content similar to rest of the image. One of the best usages of this can be object removal from images. Implemented content aware image completion by computing offset statistics of similar patches in input image, using nearest neighbor fields from kd-trees and optimization by graph cuts. https://github.com/Pranshu258/Image_Completion

CROWD BEHAVIOR ANALYSIS (ARTIFICIAL INTELLIGENCE)

Crowd behavior analysis is an important field of research in modern world. It has wide applications in surveillance and public safety which are one of the prime social concerns. One way to analyze crowd behavior is obtain crowd movement data and then find out outliers in the individual trajectories to infer any abnormal behavior in the crowd. Implemented a system that detects abnormal activity in a crowd with data from the movements of individuals. https://github.com/Pranshu258/Crowd_Behavior_Analysis

SKYLINES FOR MULTICRITERIA DATA ANALYSIS (DATABASE QUERIES)

Skylines queries have huge applications in flight and hotel booking systems where the user wants to choose an option which is not worse than any other based on multiple criterions such as rating, price and distance. Designed and implemented an algorithm to extract diverse and representative skylines with high confidence from multicriteria data in which absolute comparison between items is impossible due to noise. https://github.com/Pranshu258/RSNC/

ALGORITHMS INSPIRED BY NATURE (NEURAL & EVOLUTIONARY COMPUTING)

Nature is known to be the best optimizer. Natural processes most often than not reach an optimal equilibrium. Scientists have always strived to understand and model such processes, resulting into algorithms that are inspired by nature, many of which can be used to solve problems for which no polynomial time algorithms exist. Explored & reviewed some of these algorithms for their practical applications. https://arxiv.org/abs/1903.01893

TECHNICAL SKILLS

Machine Learning, AI	PyTorch, ScikitLearn, OpenCV, OpenAI
Microsoft Azure	Cognitive Services, Logic Apps, Service Bus, AAD, Key Vault, AppInsights
Programing Languages	C/C++, C#, Python, PowerShell, TSQL, HTML, JavaScript, CSS
Frameworks & Tools	.NET Framework, Django, Angular, NodeJS