

# PRANSHU GUPTA

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Atlanta, Georgia

## EDUCATION

**GEORGIA INSTITUTE OF TECHNOLOGY** *Atlanta, Georgia*

MS Computer Science, Enrolled

**INDIAN INSTITUTE OF TECHNOLOGY** *Kanpur, India*

B.Tech. Computer Science and Engineering, May 2017

## TRAINER

**INTRODUCTION TO WEB DEVELOPMENT**

Association for Computing Activities, IITK, 2017

**Trained 40 Students**

## SKILLS

PyTorch, ScikitLearn, OpenCV

Microsoft Azure, Function Apps, Service Bus, Cosmos, ML Studio, Cognitive Services, Logic Apps

C/C++, C#, Python, HTML, CSS, JavaScript, Django, Angular

## HACKATHON

**DigiPrint**, 2<sup>nd</sup> place among Microsoft Campus Hires 2017

## COURSES

Machine Learning, Deep Learning, Reinforcement Learning, Artificial Intelligence

Computer Graphics, Computational Photography, Computer Vision

Compiler Design, Database Systems, Systems Security, Operating Systems

## PROFESSIONAL EXPERIENCE

Software Development Engineer

**MICROSOFT**, India / 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.

- Designed and implemented a fault-tolerant, serverless data flow orchestration layer using Azure Function apps. This delivered a **3x performance improvement & an operational cost reduction of 90%**.
- Implemented a data standardization service using Azure Cognitive Services to standardize around 100K ambiguous user inputs/day in real time, enabling better insights from the data.
- Contributed to Microsoft VS Code** on GitHub, to help enable strict null check tests across the codebase.
- Developed features for the front end of the Customer Data Enrichment Service. Optimized bulk file upload component of the app to **improve performance by 40x**.
- Responsible for end to end ownership of user stories including Development, Unit Testing, Functional Testing, Accessibility Testing, Security and CI/CD.

Software Development Intern

**MICROSOFT**, India / May 2016 – June 2016

- Implemented an AI powered chat bot using Microsoft Bot Framework, allowing users to interact with Dynamics365 in natural language.

Software Development Intern

**GREENDZINE TECHNOLOGIES**, India / May 2015 – 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.

## PROJECTS

**PROJECT TESSERAEE**, IARPA | SocWEB Lab, Georgia Tech

Utilizing multimodal data streams with social media to predict and characterize various attributes of physical and mental well-being of individuals, with the help of various natural language processing, machine learning and statistical modelling techniques.

**Content Aware Image Completion**, Prof. Vinay P. Namboodiri | IITK  
Image inpainting by computing offset statistics of similar patches in the input image, using nearest neighbor fields and energy optimization by graph cuts.

**Survey: Algorithms Inspired by Nature**, Prof. Arnab Bhattacharya | IITK  
A study of neural and evolutionary algorithms like ant colony, particle swarm optimization, simulated annealing and genetic algorithms.

**Crowd Behavior Analysis**, Prof. Vinay P. Namboodiri | IITK  
Detecting abnormal activity from individual trajectories in crowd data by partition-and-detect methodology.

**PyCS: A Compiler for C# in Python**, Prof. Subhajit Roy | IITK  
An end to end compiler built in Python to translate C# code into Intel x86.

**Skylines for multi-criteria Data Analysis**, Prof. Arnab Bhattacharya | IITK  
Extracting representative skylines from noisy data based on multiple criterions.

**Renju: A board game in Python**, Programming Club | IITK  
AI player of Japanese board game Renju, using Minimax and  $\alpha - \beta$  pruning algorithms.