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| PRANSHU GUPTA  <https://pranshu258.github.io/>  [pranshug258@outlook.com](mailto:pranshug258@outlook.com)  +1 928 265 8937  Atlanta, Georgia EDUCATION **GEORGIA INSTITUTE OF TECHNOLOGY** *Atlanta, Georgia*  MSCS, Machine Learning, May 2020  **INDIAN INSTITUTE OF TECHNOLOGY** *Kanpur, India*  B.Tech. Computer Science and Engineering, May 2017 SKILLS **Languages**  *Proficient* - C#, Python, C/C++, HTML, CSS, JavaScript, SQL  *Familiar* - TypeScript, PHP, Java  **Machine Learning**  PyTorch, ScikitLearn, OpenCV  **Cloud**  Microsoft Azure, Function Apps, Logic Apps, Service Bus, Cognitive APIs, Key Vault, App Service  **Web Dev**  Django, Angular, NodeJS INSTRUCTOR **INTRODUCTION TO WEB DEVELOPMENT**  Association for Computing Activities, IITK, May 2017  **Trained 40 Students** (20 days) HACKATHON DigiPrint, **2nd place** **among Microsoft Campus Hires** 2017 COURSES Machine Learning, Deep Learning, Reinforcement Learning, Computer Graphics, Computer Vision, Computational Photography, Compiler Design, Databases, Operating Systems, Systems Security |  | PROFESSIONAL EXPERIENCEGraduate Research Assistant \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_[**SOCWEB LAB**](https://socweb.cc.gatech.edu/), Georgia Tech / August 2019 – Present Building statistical and machine learning models for [**the Tesserae project**](https://tesserae.nd.edu/).   * Utilizing multimodal data streams with social media to predict and characterize attributes of physical and mental well-being of individuals. * Ongoing work on investigating Hawthorne Effect in online activity.  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%.** * Responsible for end to end ownership of user stories including Development, Unit Testing, Functional Testing, Accessibility Testing, Security and CI/CD. * **Contributed to Microsoft VS Code** on GitHub, to help enable strict null check tests across the codebase.  Software Development Intern \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**MICROSOFT**, India / May 2016 – June 2016  * Implemented an AI powered chat bot using Microsoft Bot Framework and Azure Cognitive APIs, allowing users to interact with Dynamics365 in natural language. * **This reduced the clicks required for certain workflows by 50%.**  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 by 20%**. * **Headed the design and development of the organization’s website**, customer and data management portals.  PROJECTS [**Deep Image Captioning**](https://github.com/Pranshu258/Deep_Image_Captioning), Prof. Dhruv Batra | Georgia Tech   * Deep reinforcement learning-based image captioning with embedding reward by modelling the task as a decision-making problem.   [**Content Aware Image Completion**](https://github.com/Pranshu258/Image_Completion), Prof. Vinay P. Namboodiri | IITK   * Image inpainting by computing statistics of patch offsets and using nearest neighbor fields and energy optimization by graph cuts. * Can fill regions which are **up to 20% in size** of the actual image.   [**PyCS: A Compiler for C# in Python**](https://github.com/Pranshu258/csharp-compiler), Prof. Subhajit Roy | IITK   * A compiler built in Python to translate C# code into Intel x86. * Supports **70% of ANTLR’s C# grammar** specification   [**Renju: A board game in Python**](https://github.com/Pranshu258/Renju), Programming Club | IITK   * Implemented an AI player for Renju, using Minimax and pruning algorithms, achieving a **winning rate of** **80% against humans** |