Parikshit Solunke

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Summary

I'm a Computer Science Ph.D. student at NYU's Visualization Imaging and Data Analysis Research Center (VIDA), under the guidance of Dr. Claudio Silva. I specialize in creating end-to-end visualization tools to facilitate the analysis of complex datasets. My current research centers on applying visualization techniques in the domains of Explainable AI and Urban Analytics.

Employment History

2022 – * **Research Assistant,** New York University.

Fall 2021 **Teaching Assistant,** University of Illinois at Chicago

Summer 2021 **Web Development Intern,** Aspire360 (now Allianse), New York, NY

Education

2022 – * **Ph.D. Computer Science, New York University, GPA:** 3.94
Advisor: Dr. Claudio Silva at NYU's Visualization, Imaging and Data Analysis Center

2020 – 2022 **M.S. Computer Science, University of Illinois at Chicago, GPA:** 3.87
Honors: Magna Cum Laude

2014 – 2018 **B.E. Computer Engineering, University of Pune, Grade: First-Class**

Projects

- **Mountaineer,** `https://github.com/PariSolunke/mountaineer`, (Submission Under review)
  - Developed in collaboration with Capital One, "Mountaineer" is a Topology-Driven Visual Analytics tool designed to facilitate the comparison of Machine Learning Explanations.
  - As the First Author, I held comprehensive responsibilities throughout the project, including:
    - Conceptualization and design of the user interface
    - Implementation and development of the tool, applying topological concepts and visualization towards comparing ML Model Explanations
    - Designing case studies and conducting interviews with industry experts to evaluate the tool.
- **GDPFinder,** `https://github.com/VIDA-NYU/GDPFinder`, (Submission Under review)
  - Estimating neighborhood well-being from high-res satellite imagery using supervised and semi-supervised learning techniques.
  - Fine tuned a ResNet-50 based architecture within the supervised methodology, facilitating predictions of GDP, educational attainment, and population density at a block level in US cities.
  - Designed a visualization tool to interpret and analyse auto-encoder and clustering results in the semi-supervised methodology.

Skills

Languages JavaScript, Python, R, SQL

Methods Visualization, Data Analytics, Machine Learning, Web Development