

Sonia Sargolzaei

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EDUCATION

Georgia Institute of Technology – Atlanta, GA Aug 2020 – May 2022 (Expected)

- Master of Science in Computer Science
- GPA: 4.0 / 4.0
- **Course Work:** Machine Learning, Computer Vision, Data and Visual Analytics, Computer Science and Engineering Algorithms

University of Tehran – Tehran, Iran Aug 2012 – Dec 2017

- Bachelor of Science in Computer Engineering
- GPA: 14.25 / 20
- **Selected Course Work:** Data Structure and Algorithms, Engineering Probability and Statistics, Introduction to Artificial Intelligence, Calculus, Differential Equations, Discrete Mathematics, Advanced Programming

WORK EXPERIENCE

Graduate Research Assistant at Ubicomp Lab Aug 2020 – Present

College of Computing, Georgia Institute of Technology – Atlanta, GA

Advisor : Professor Gregory Abowd

- Data analysis in the *Contact Tracing* project—processing and cleaning Wifi data of the students, and applying statistical techniques to infer risky interactions and locations at Georgia Tech campus in Atlanta, and come up with effective policies to minimize the spread of infection throughout the campus using Python programming
- Data processing and data cleaning in *Wifi Study* project to infer academic success in students based on their dwelling and interactions at Georgia Tech campus in Atlanta using Python programming

RESEARCH EXPERIENCE

Graduate Research Assistant at Ubicomp Lab Aug 2020 – Present

College of Computing – Georgia Institute of Technology

Advisor : Professor Gregory Abowd

- Data analysis in *Contact Tracing* project, processing, cleaning and analysis of students' WiFi data to infer high-risk locations, events and gatherings at Georgia Tech campus using Python programming
- Data processing and data cleaning in the *Wifi Study* project, using consented students WiFi data to infer their academic success

SELECTED PROJECTS

Graduate Projects Aug 2020 – Present

- Image Classification based on CNN, using MNIST dataset and Keras API
- Implementing Simulated Annealing Local Search Algorithm to solve Minimum Vertex Cover
- Implementing PCA to reduce dimension of the data without losing important features

Other Projects Aug 2012 – Aug 2020

- Implementing A* algorithm with different heuristics to solve shortest path problem
- Designing a course management system using object oriented programming in C++
- Design of evolvable accelerator for approximate computation
- Using VerbNet to Eventify sentences in an NLP project
- Implementing Newton's method to find roots of functions
- Using Image Filtering techniques to create Hybrid Images

SKILLS

- **Programming Languages:** Python, C++, C, Java, MATLAB, SQL
- **Web Technologies:** HTML, CSS, JavaScript
- **Tools:** Git, Eclipse, Jupyter Notebook