

I am looking for highly motivated and self-driven undergraduate and Ph.D. students, who are interested in:

(1) Developing principled methodologies, efficient and scalable optimization algorithms, and practical theories for machine learning, especially deep learning.

(2) Developing principled methodologies for neural machine translation and language model pre-training/fine-tuning.

*Prospective Ph.D. students should have an excellent background in computer science, electrical engineering, mathematics, physics, statistics, or other related fields. Coding skills, as well as related experiences are desirable. Most important is a strong enthusiasm in the cutting-edge research of machine learning and natural language processing. More about my research can be found on

<http://www2.isye.gatech.edu/~tzhao80/>

Prospective Ph.D. students are encouraged to apply to the PhD program in Machine Learning at Georgia Tech:

<http://ml.gatech.edu/phd>

*Prospective undergraduate students should have a solid background in computer science, electrical engineering, mathematics, physics, statistics, or other related fields.

(1) Several undergraduate courses including **Calculus** (e.g., MATH 1501/1502, 2551/2552, 2561/2562), **Probability** (e.g., MATH 3235/4221/4222), **Linear Algebra** (e.g., MATH 1554/1564), and **Machine Learning** (e.g., CS 4641, CX4240) are **prerequisite**.

(2) Mathematical Statistics(e.g., MATH 4261/4262) and Numerical Analysis (MATH 4640/4641), Algorithms (e.g., CS 4540), Optimization (e.g., MATH 4580, ISyE 4133) are plus.

Most important is a strong **enthusiasm** and **self-study ability** in the cutting-edge research of machine learning and related applications, such as natural language processing and computer vision.