

PhD Seminar: AI, Technology and Finance

Class Information

- MGT 8803: AI, Technology and Finance (Ph.D. Seminar),
- 3 credits,
- Fall 2026
- Instructor: Sudheer Chava

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Course Description

The class will focus on **Financial Intermediation**, broadly defined. We will also focus on papers at the intersection of **Financial Intermediation, Technology**, including **FinTech, Crypto, AI and ML** and **Household Finance**. We will focus more on empirical papers and recent papers rather than classic finance papers. Some of the topics that we will cover in the class include

- AI and Finance
- AI and Financial Intermediation
- AI and the Future of Work
- FinTech
- Crypto Tokens
- Stable Coins, Deposits and Depositor Behavior
- CBDC and Financial Intermediation
- Open Banking

If we have time, we will discuss

- Credit Unions

- Credit Contracts
- Credit Lines and Covenants
- Stable Coins, CBDC and Transmission of Monetary Policy
- MPC and Financial Intermediaries

Learning Outcomes

The learning outcomes for this course are as follows:

- understand the role of financial intermediation in the economy
- understand how technology is impacting financial intermediation and how it is changing the landscape of finance
- conduct research on how AI is transforming the financial services industry
- develop skills to critically evaluate and execute research in the field of finance

Course Meetings

The course will meet on Mondays and Tuesdays.

- On Monday from 12:30-2:30pm, Ph.D. students can present original empirical work
- On Tuesday 12:45-2:00pm, Ph.D. students will present published / working papers on the topics outlined in the syllabus.

Course Material

The course material consists Review articles, published journal articles and working papers. I will update the material one or two weeks ahead. For background reading, you can read [Microeconomics of Banking 3/e](#).

Course Requirements

Students are expected to present a research paper or topic in every class. For some of the assigned papers, students are required to summarize the paper or write a referee report. There will also be some data exercise using Banking data that the students are expected to undertake and present in the class. In addition, there is a final project for the class wherein students have to submit a detailed proposal for a new research idea. You can develop the discussions in the class further and use existing and ongoing research for the final project report.

Assignments

When assigned the students are expected to

- write a 2-page referee report for the (published / working paper) that will be discussed in the Tuesday class or
- Prepare a presentation and discuss the assigned paper or
- write a 1- or 2-page “insights” from the data and visualization assignment. The writeup should include
 - A title summarizing the insights (1-line)
 - Abstract
 - Main Insights

Paper Discussions and Presentations

We will cover one broad topic each week, but some topics may take more than one week. The students are expected to read all the review papers, journal articles and working papers assigned for the week. Each week, students are expected to present a paper summarizing the main contributions of the paper. The student should summarize the papers related to the topic in about 20 minutes and we will have 10-15 minutes for class discussion. I would recommend the students to organize the presentation as follows:

- Discuss the broad economic idea. Why is it important and worth studying?
- What do you think is the incremental contribution of the paper to the literature?
- Outline the main hypotheses. Why do we care to know the answer to these questions?
- What is the identification strategy? Are the endogeneity concerns addressed convincingly?
- What are the main data sources used in the paper (surveys/administrative data, proprietary/publicly available)?
- What are the key findings and economic insights from the paper? Why are they interesting?
- Provide a summary of your **final take** on the paper. If you do not like something in the paper, please discuss how you would have done things differently. Remember it is easy to criticize a paper, but tough to write a paper! Be constructive!
- Discuss potential extensions of the idea.

Grading

The grading for the class would be based on

- Class Presentations, Paper Summaries and Referee Reports (30%)
- Written reports on original data analysis (20%)
- Final project (50%)

Note: For the papers that will be included in the detailed week by week schedule

1. R is required
2. P is presentation
3. S is summary
4. RR is Referee Report
5. BR is background reading paper, no presentation

Individual Assignment:

1. Break your research workflow into various tasks. For each of the tasks highlight how
 - AI agents can be helpful and harmful
 - what are the “guard rails” that you need to use
 - which agents would you use
 - how would you “orchestrate” these agents
 - best practices
2. Some tasks that you can consider are
 - Data and Analysis
 - Data creation. Can you use LLMs to “extract” or “generate” data
 - Data scraping at scale
 - ETL of the data
 - Analysis of the data
 - Visualization
 - Report generation
 - Writing
 - hypothesis generation
 - background literature reviews
 - keeping up to date with new research
 - writing and grammar
 - “refereeing” your own paper
3. After the class discussion, write down a “best practices” note for using AI agents in economics and finance research.

Attendance and/or Participation

Attendance is mandatory for all class sessions. If you are unable to attend a class session, please notify me in advance and provide a valid reason for your absence. Participation in class discussions is also expected and will be factored into your overall grade.

Academic Integrity

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. Review Georgia Tech's Honor Code and the student Code of Conduct.

Any student suspected of cheating or plagiarism on a quiz, exam, or assignment will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.

Accommodations for Students with Disabilities

If you are a student with learning needs that require special accommodation, contact the Office of Disability Services (404-894-2563) as soon as possible to make an appointment to discuss your special needs and to obtain an accommodations letter. Please also e-mail me as soon as possible in order to set up a time to discuss your learning needs.

Student-Faculty Expectations Agreement

At Georgia Tech, we believe that it is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. The Student-Faculty Expectations articulate some basic expectations that you can have of me and that I have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, I encourage you to remain committed to the ideals of Georgia Tech while in this class.