

***Presidential Award for Excellence in Teaching:
2023, Professor & Associate Professor***

Ha-Chin Yi

The List of Internal / External Invited Letters, Statements, or Testimonials

1. The letter from Professor Kyojik “Roy” Song from the Sungkyunkwan University (SKKU), Seoul, Korea. Professor Song is the conference host of [2022 Global AI Finance Research Conference](#) held in Singapore, December 2022.
2. The letter from a graduate student, Ahsutoss Das. Mr. Das has been accepted into a Ph.D. program in Florida International University and is waiting for answers from other schools.
3. The exit letters by a graduating student from Retention Management & Planning
4. Remarks by other students from the end-of-semester student evaluations
5. The email from a student
6. The entire set of student comments from Fall 2022 semester

Letters, Statements, or Testimonials 1: A Letter from Prof. Song

Professor Kyojik “Roy” Song teaches at the Sungkyunkwan University (SKKU), Seoul, Korea. He was the conference host of [2022 Global AI Finance Research Conference](#) held in Singapore, December 2022.



Business School
Department of FinTech

March 30, 2023

Teaching Award Review Committee
Texas State University
United States of America

Dear Committee members,

I am pleased to write this letter to recommend Prof. Ha-Chin Yi for the Presidential Excellence in Teaching Award at your university. Prof. Yi delivered a special lecture on “Natural language processing in finance” at the tutorial session of 2022 Global AI Finance Research Conference, which was held on December 12-13, 2022 in Singapore. As the program chair of the conference, I selected Prof. Yi as a special lecturer at the tutorial session based on his background and teaching material out of about 10 candidates. The most of audience at the tutorial session was MS and Ph.D. students from Sungkyunkwan University in Seoul, Korea, National University of Singapore, and Vietnam National University. Based on the student evaluation on the tutorial session, I found that Prof. Yi’s lecture was very insightful and conducive to the research using NLP. Positive learning experience was evident across three groups from the above-mentioned universities. I will not be surprised to see that his lecture will attract attentions from other academic research institutions in the future.

I am not hesitant to recommend Prof. Yi for the teaching award. If you have any question about the recommendation, please feel free to contact me.

Sincerely,

Kyojik “Roy” Song
Program Chair, Global AI Finance Research Conference
Chair, Dept. of FinTech, Sungkyunkwan University
Phone: +82-2-760-0497
Email: roysong@skku.edu|

Letters, Statements, or Testimonials 2: A Letter from a former student

Ahsutoss Das. Mr. Das has been recently accepted into a Ph.D. program in Florida International University and is waiting for answers from other schools.

To the Presidential Award for Teaching Excellence Review Committee

I am writing to you today to share some of my exciting experience about my professor, Professor Dr. Ha-Chin Yi. I am glad that he has been nominated for the Presidential Award for Teaching Excellence, and I believe that he is well-deserving of this honor. I wanted to take this opportunity to share with you some of the reasons why I believe that Dr. Yi is such an exceptional teacher. Firstly, I appreciate his unique teaching style, which is both engaging and informative I have ever seen. His unique teaching style has kept me engaged and motivated throughout the semesters. He has a way of breaking down complex concepts into simple terms that are easy to understand. Whether through engaging lectures, thoughtful discussions, or hands-on exercises, Dr. Yi consistently challenges his students to think critically and creatively.

Regarding instructional methods, Dr. Yi utilizes a wide range of techniques that cater to different learning styles. He uses multimedia presentations, interactive group discussions, and hands-on projects to help us grasp the concepts thoroughly. His passion for the subject is evident in the way he delivers the material, and his enthusiasm is infectious. I want to highlight Professor Yi's dedication to his students' success. He always made himself available outside of class to answer any questions or provide additional support. One thing that I appreciate the most about Dr. Yi's class is how it has improved my learning experience. So far, I have had two classes, FIN 5322: Investment Analysis and QFE 5395: Independent Study, with Dr. Yi. His class has helped me develop a deeper understanding of the subject matter and its real-world applications. I feel more confident in my ability to apply the concepts I have learned in the class to real-life scenarios.

Furthermore, my research experience in finance began with my research supervisor, Dr. Ha-Chin Yi, a Professor of Finance at Texas State University. Under his supervision, I got interested in NLP text analysis of corporate, legal, regulatory disclosure of U.S. firms. As part of our research, we downloaded Form 10-Ks of all U.S. companies (2010-2021) from the SEC Edgar database. We compiled a database of texts from Risk Factors, Management Discussion & Analysis of Financial Condition and Result of Operations, and Quantitative & Qualitative Disclosures about Market Risk from all the Form 10-Ks. Within the database, we use NLP text analysis, a machine learning approach, through Python's language algorithm to count all positive words, negative words, polarity score, complex words, constraint words, uncertainty words, and fog index (index that determine the level of text readability) using the Loughran-McDonald dictionary method. Our aim was to identify the relationships between these variables and stocks return of the firms. We are also currently considering conducting text analysis of all the judiciary hearing of the firms and how they influence the investors and the firm's market performance.

Before taking the course with Dr. Yi, I had no idea how to read SEC documents with Python. However, Professor Yi's expertise in this area was apparent from the first lecture. He walked me through the process step-by-step and provided us with helpful resources to deepen my understanding. I can confidently say that I have developed a valuable skillset thanks to Professor Yi's guidance. Additionally, I was particularly impressed by Dr. Yi's commitment to providing practical, real-world applications for the material covered in class. For example, his lessons on the process to read SEC documents with Python were incredibly useful and applicable to the field I was pursuing. Our collaborative works equipped me with necessary quantitative and qualitative skills for interpreting complex financial theories and evaluating the validity of research hypotheses. This helped me to better understand the importance of the material and how it could be applied in my future research.

Recently, I got acceptance for pursuing my Ph.D. in Finance at Florida International University, Miami, Florida for Fall 2023. I would definitely say, my collaborative research works with Dr. Yi, his guidance and supervision allow me to demonstrate myself as highly qualified applicants for my Ph.D. applications. I am truly grateful to him.

In conclusion, Professor Yi's teaching has been a transformative experience for me, and I believe that he is a deserving candidate for the Presidential Award for Teaching Excellence. I am grateful for his unwavering dedication to teaching and his commitment to providing his students with a rich and engaging learning experience. Thank you for providing me with the opportunity to learn under such a brilliant educator.

With best regards,

Ahsutoss Das
Graduate Candidate, MSQFE program
GIA, Finance & Economics Department
Texas State University, San Marcos, Texas
E-mail: ahsutoss.das@txstate.edu

Letters, Statements, or Testimonials 3: The exit letters by a graduating student from Retention Management & Planning

Ha Chin Yi
Finance & Economics Department
Texas State University-San Marcos

Dear Ha Chin:

As part of the Graduating Student Recognition of Campus Support program, an e-mail celebrating the success of our recent May 2008 graduates was sent late last semester. They were congratulated on their accomplishments and were asked to name any faculty or staff member(s) that they felt contributed significantly to their success and development.

Congratulations! You were named by the following graduate as a person at Texas State University-San Marcos who made a contribution to their academic career:

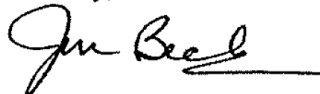
Jonathan R Reading's Comment:

I took Dr Yi. for fin. 3312 and fin. 3313. These are the basic finance courses and I feel that part of my success was due to Dr. Yi and his teaching approaches. Students left his class with a great foundation to continue to build on. He is discussed within finance students as one of the best professors to take. His abilities to relate the material brought finance to life. Dr. Yi stands apart from his peers of professors as someone that truly has pride and passion for what he does for the students of tomorrow's future.

Jonathan Reading

There is always a sense of accomplishment in knowing that your efforts during the past year have dramatically influenced the lives of one or more graduates. Throughout the year, you have given your time and talent to many students. It is dedicated individuals such as you that make a real difference in our student's academic and personal development. It is my pleasure to be able to thank you on behalf of the student(s) whose life/lives you have touched. The students appreciate it, and we in the Vice President for Student Affairs Office offer our thanks for helping make Texas State "The Rising Star of Texas"!

Sincerely,



Ms. Jennifer A. Beck
Director, Retention Management & Planning

cc: Dr. Joanne H. Smith,
Vice President for Student Affairs

OFFICE OF THE VICE PRESIDENT FOR STUDENT AFFAIRS

601 UNIVERSITY DRIVE | SAN MARCOS, TEXAS 78666-4615 | phone 512.245.2152 | fax 512.245.7979 | WWW.TXSTATE.EDU

Texas State University-San Marcos, founded in 1899, is a member of The Texas State University System.

Letters, Statements, or Testimonials 3: The exit letters by a graduating student from Retention Management & Planning

Ha-Chin Yi
Finance & Economics Department
Texas State University-San Marcos

Dear Ha-Chin:

As part of the Graduating Student Recognition of Campus Support program, an e-mail celebrating the success of our recent May 2008 graduates was sent late last semester. They were congratulated on their accomplishments and were asked to name any faculty or staff member(s) that they felt contributed significantly to their success and development.

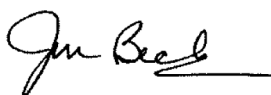
Congratulations! You were named by the following graduate as a person at Texas State University-San Marcos who made a contribution to their academic career:

Meagen Park's Comment:

Thank you for making finance so interesting and exciting. It seems that some professors will teach a course for so long, that they lose their passion. You were my first Finance Professor at Texas State and I am now graduating Summa Cum Laude. I wanted to acknowledge your wonderful style of teaching, which sparked my interest in finance. You inspired me to take my career in finance to another level. Thank you for taking the time to speak with your students and encouraging us throughout our journeys.

There is always a sense of accomplishment in knowing that your efforts during the past year have dramatically influenced the lives of one or more graduates. Throughout the year, you have given your time and talent to many students. It is dedicated individuals such as you that make a real difference in our student's academic and personal development. It is my pleasure to be able to thank you on behalf of the student(s) whose life/lives you have touched. The students appreciate it, and we in the Vice President for Student Affairs Office offer our thanks for helping make Texas State "The Rising Star of Texas"!

Sincerely,



Ms. Jennifer A. Beck
Director, Retention Management & Planning

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Letters, Statements, or Testimonials 4: Remarks from other students at the end of semester student evaluations

- Very appreciative to his contribution to my academic experience here at Texas State.
- For his genuine spirit and desire for his students to understand finance, he is approachable, professional, provided well rounded classes, kept up with current events. Very enjoyable.
- My diploma will mean so much more because of what I learned in this class.
- I greatly appreciate everything you did for my education inside and outside the classroom.
- This class has been such a joy because learning from Dr. Yi has been remarkable.
- You are not just a professor; you are a motivator as well.
- I feel like this was my most influential class, and possibly one of the top classes that will help me out in life.
- An engaging and enthusiastic instructor who makes the material interesting and informative.
- You inspired me to take my career in finance to another level.

Letters, Statements, or Testimonials 5: An Email from a student, Martin Pace

From: "Pace, Martin N" <martin.pace@txstate.edu>
To: "Yi, Ha Chin" <hy11@txstate.edu>
Date: Tue, 13 May 2008 14:42:57 -0500
Subject: Thank you for everything Dr. Yi
Thread-Topic: Thank you for everything Dr. Yi
Thread-Index: AQHItTGLbWDsMF4grEKIdsbYnsDxtg==
Accept-Language: en-US
X-MS-Exchange-Organization-AuthAs: Internal
X-MS-Exchange-Organization-AuthMechanism: 04
X-MS-Exchange-Organization-AuthSource: hubsrv4.matrix.txstate.edu
X-MS-Has-Attach:
X-MS-Exchange-Organization-SCL: -1
X-MS-TNEF-Correlator:
acceptlanguage: en-US

Dr. Yi,

I wanted to thank you for a wonderful FIN 3313 class this spring. I was in your TH 12:30pm section. You are the single best professor Texas State University. I'm a transfer student and this spring was only second semester at the McCoy CBA, but everything I was able to learn from you will play a revolving role in my career.

There are too many professors in the world who implement a bland and boring "robotic" method of teaching - but you are far from that. You are down-to-earth, have a good sense of humor, and you can relate to us as students. Although you most certainly challenge us, all it takes is some listening and hard work for us to soak up your knowledge. I was suspecting that half the class would drop in the middle of the semester but your teaching style maintained the attention and efforts of even the students who had trouble early on. Another thing that stands out about you as an instructor is that you actually care about your students and their success. Many professors don't and are just there to give their spiel and earn their salary, and even worse professors believe they are impassable gatekeepers of academia.

You also taught us that money isn't everything, which is truly beneficial to all of us. The way the financial system works and being able to understand the complexity intertwined with finance and economics is the true reward.

It's a shame that I probably won't be teaching another course that I need, but I would choose you again and I will recommend you to any student who asks. Your course website was also an excellent resource, so thank you for maintaining it.

Thank you for everything, Dr. Yi. I hope you enjoy an excellent summer!

-Martin
martin.pace@txstate.edu

Letters, Statements, or Testimonials 6: The entire set of student comments from Fall 2022 semester

19 - This is your opportunity to describe the things the instructor did that helped you learn.	
Ha Yi	
Response Rate	11/33 (33.33%)
<ul style="list-style-type: none"> • He went slowly, sat down in front of class and tried to connect. In doing this, it made the class much more engaging rather than an average professor just rambling on like a robot. • His class it was very entertaining and I did learned a lot of concepts and it's applications I didn't know before. I like how you have multiple resources in his class for you to do good. The material can be very complex and hard but it is doable. • gave us tips on what to go over to be prepared for the exams. • offered lots of resources to look over • the professor took an honest interest in the students and their future careers. he asked great questions, and showed us genuine real world case studies • Best professor I have ever had. He explained to us everything in great detail. He answered questions, let us ask him anything related to class. Overall, everything was very well organized. best canvas page in the world for sure. • the worksheets given in class helped a lot in understanding material more than I thought • Open to questions and clarifications. Very knowledgeable. • Dr. Yi has been the most engaging professor I've had in my college career. His teaching style is comprised of multiple different sources of media and channels to portray the message he's trying to teach. Dr. Yi would jump from lecture, to a video, to multiple choice questions, then to a back and forth discussion multiple times throughout one class period. It's clear that Dr. Yi has a genuine passion and interest for his educational field. More than any other teacher I've been able to learn from, Dr. Yi exemplifies a self motivated effort to educate his students about the world of finance. • great • Dr Yi is an incredible teacher. He is is obviously an efficient investor and knows what he is talking about 	

20 - Briefly describe the things the instructor could do to improve learning.	
Ha Yi	
Response Rate	10/33 (30.3%)
<ul style="list-style-type: none"> • Not use Excel to show how to solve problems because we don't get to use Excel during class. Also if the Canvas page was more simplified it'd be a lot less overwhelming to look at. • I wish sometimes we spend more time in some complex topics... especially because is an investment class but I do understand sometimes the time it's against us. We need to update the canvas sites more often. • Slow some sections down for students who seem like they aren't understanding some of the information and not going based on the students who answer everything. • have the lecture material cover more of what is on the exams • I feel as if the instructor did a perfect job of sharing his knowledge and experience with us • Nothing, he is the best • I think everything is done good • Less confusing canvas page. • No Complaints. • Reallt nothing. I'd make the in class assignments homework for students to complete outside of class 	

19 - This is your opportunity to describe the things the instructor did that helped you learn.	
Ha Yi	
Response Rate	9/29 (31.03%)
<ul style="list-style-type: none"> • I liked the why he taught the course they lecture style really got the point across. • Dr Yi is someone I wish I can take for all my classes for my core finance major. You can tell that he is prepared and now the material. He is experienced and he is always willing to work with you as long you are responsible and do what is asked. • Repeating important topics over and over again, and going over problems in detail to make sure everyone understood. • N/A • All of the real world examples and advice given was appreciated. I liked that he continuously made sure we were getting what we needed to know. I like that we worked through examples in class together. • Best professor I have ever had. He explained to us everything in great detail. He answered questions, let us ask him anything related to class. Overall, everything was very well organized. best canvas page in the world for sure. • Was open to questions and clarification. Very knowledgeable. • great teacher • Awesome professor! 	

20 - Briefly describe the things the instructor could do to improve learning.	
Ha Yi	
Response Rate	7/29 (24.14%)
<ul style="list-style-type: none"> • There's too much information on the canvas site that you can get lost if you don't know what you're looking for. Something that might help is putting a new tab about miscellaneous material; stuff that is helpful but not required to understand the course. • Update the canvas site more often. • n/A • The canvas page is awesome but I think it could be organized better for easier readability. It's quite overwhelming and when I need a resource I feel overwhelmed trying to find it. I would suggest using more accordion boxes for the home page. • Nothing, he is great! • Less confusing canvas page. • Think he did amazing. 	

19 - This is your opportunity to describe the things the instructor did that helped you learn.	
Ha Yi	
Response Rate	1/31 (3.23%)
<ul style="list-style-type: none"> • Dr. Yi was great at engaging the class and keeping everyone interested in the subject matter. 	

20 - Briefly describe the things the instructor could do to improve learning.	
Ha Yi	
Response Rate	1/31 (3.23%)
<ul style="list-style-type: none"> • He could slow down the class and really make sure all the students understand the material. 	

***Presidential Award for Excellence in Teaching:
2023, Professor & Associate Professor***

Ha-Chin Yi

The List of Evidentiary Materials and Exhibits

1. Pictures of my tutorials, workshop, and other presentations relevant to teaching.
2. The sample Canvas Page and Data Analytics Webpage (<https://hachinyi.wp.txstate.edu/my-codes/>)*
3. A collection of former students' responses to my job search inquiry through the *Linkedin* (<https://hachinyi.wp.txstate.edu/advices-from-former-students/>)**
4. Certificates of Faculty Development
5. Internal Awards in Teaching

* I have created the web site showing all learning materials for FinTech, Machine Learning, Python coding, Natural Language Process, and others. To see the full content of it, please go to the site.

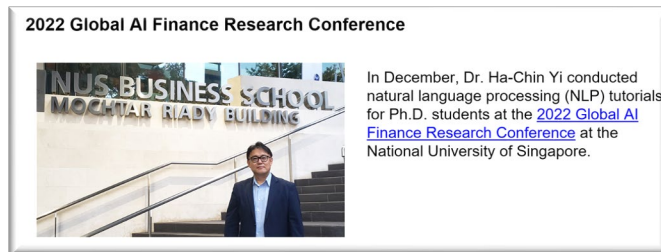
** I reached out to my former students through **Linkedin** and asked the question.

“Hi, This is Professor Ha-Chin Yi from Texas State University. I am reaching out to you to hear about how you successfully secured your current job or previous position. I am collecting positive/negative stories from you all so that I can pass them on to my current students. Your experience will be very helpful. Could you briefly share your job search journey with us? You can leave it here or email me at hy11@txstate.edu. Thank you!”

Exhibit 1: Pictures of Tutorials, Workshop, and Other Presentations



Conference Tutorial Session on NLP, Atlanta, GA 2022



Natural Language Processing Tutorial, Singapore 2022



FinTech Workshop at the University of South Florida, Tampa, FL 2023

Exhibit 2: The Sample Canvas Page and the Personal Data Analytics Webpage

(<https://canvas.txstate.edu/courses/2047926/pages/0-dot-0-class-overview>)

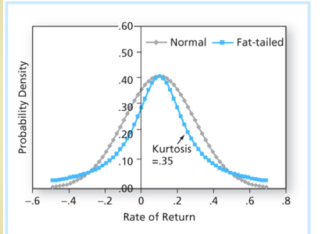

(<https://canvas.txstate.edu/courses/2042682/pages/1-the-risk-return-tradeoff-in-capital-markets-ch-11>)

(<https://hachinyi.wp.txstate.edu/my-codes/>)

Skew is the average cubed deviation from the mean, expressed as a multiple of the third power of the standard deviation. Negative values of skew indicate that extreme bad outcomes are more frequent than extreme positive ones. that is, skewed to the left. When the distribution is negatively skewed, the SD will underestimate risk.

Kurtosis concerns the likelihood of extreme values of either side of the mean at the expense of a smaller likelihood of moderate deviations. High kurtosis means that there is more probability mass in the tails of the distribution than predicted by the normal distribution. That is, slender shoulder or fat-tailed distribution. Although symmetry is still preserved, the SD will underestimate the likelihood of extreme events: Large losses as well as large gains. Kurtosis is calculated from the average value of deviations raised to the fourth power. It is a natural measure of **tail risk**.

Normal and Fat-Tailed Distributions

Using Canvas editing tools, I created Page for each chapter with lecture summary, graphs, tables and other visual and audio materials.

2. Prospect Theory

Prospect theory, developed in the late 1970s, is a collection of ideas that provides an alternative to classical, rational economic decision making. The foundation of prospect theory rests on the idea that investors are much more distressed by prospective losses than they are happy about prospective gains.

Investors seem to be willing to take more risk to avoid the loss of a dollar than they are to make a dollar profit. Also, if an investor has the choice between a sure gain and a gamble that could increase or decrease the sure gain, the investor is likely to choose the sure gain.

Prospect Theory has **four forms** of cognitive biases.


Frame Dependence **Loss Aversion** Mental Accounting Overconfidence


This is about making "inconsistent decisions."

Watch this video: <https://www.coursera.org/lecture/biases-portfolio-selection/frame-dependence-NLJ15>

If an investment problem is presented in two different (but really equivalent) ways, investors often make inconsistent choices. That is, how a problem is described, or framed, seems to matter to people. Some people believe that frames are transparent; that is, investors should be able to see through the way the question is asked. Frame dependence is an example of a belief perseverance bias.

An example of this is the change in 401(k) plans that allowed employers to automatically enroll participants, while allowing them to opt out. The employees still had the same choice (participate or not), but participation significantly increased with the change.



 Python 6. Beta, CAPM, and Fama-French Three Factor Model

Main Codes

A short code to estimate betas for S&P 500 firms
 beta_SP500_capm_ols_stack_up.ipynb: https://colab.research.google.com/drive/18Hm1933bBIMEW_DNjXfqUdJmLOW6b9se?usp=sharing

CAPM, 3-factor, 4- and 5-factor model
 FamaFrench_book2.ipynb: <https://colab.research.google.com/drive/19703NFCtKksVlsezEq7zWltuLUzMz5sf?usp=sharing>

FamaFrench3Factor1_datareader.ipynb: https://colab.research.google.com/drive/1Q4pwmjygtCbAZE8ySCgcp70Y4tFxU_tT?usp=sharing

CAPM from Hilpisch AI Machine P117
 Hilpisch_04_data_driven_finance_a_CAPM.ipynb: <https://colab.research.google.com/drive/1x2erQoGfVy3gGhcgjFJSxwY0YUj7P6Wg?usp=sharing>

I provide my Python codes using Google Colab.

$$E(R_i) = R_f + \beta_i [E(R_m) - R_f]$$

Beta is not observable from the market and must be calculated, and hence tests of the CAPM are usually done in two steps – first, estimating the stock betas and second, actually testing the model. It is important to note that the CAPM is an equilibrium model or a model in terms of expectations. Thus, we would not expect the CAPM to hold in every time period for every stock. But if it is a good model, then it should hold ‘on average’. Usually, we will use a broad stock market index as a proxy for the market portfolio and the yield on short-term Treasury bills as the risk-free rate.

A stock’s beta can be calculated in two ways – one approach is to calculate it directly as the covariance between the stock’s excess return and the excess return on the market portfolio, divided by the variance of the excess returns on the market portfolio

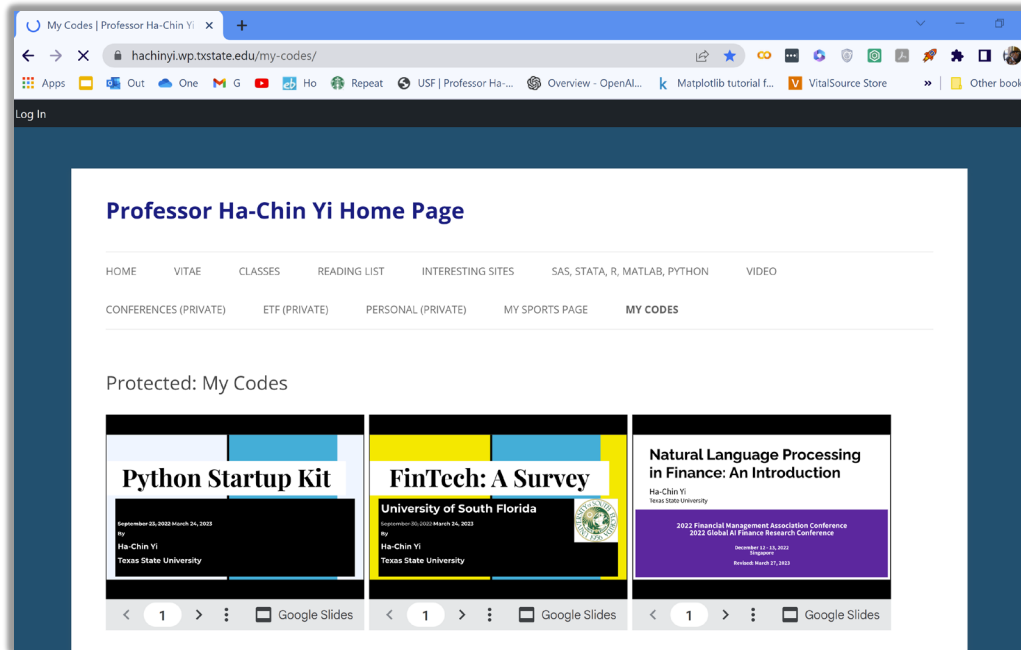
$$\beta_i = \frac{\text{Cov}(R_i^e, R_m^e)}{\text{Var}(R_m^e)}$$

where the ^e superscript denotes excess returns (i.e., the return with the risk-free rate subtracted from it). Alternatively, and equivalently, we can run a simple time-series regression of the excess stock returns on the excess returns to the market portfolio separately for each stock, and the slope estimate will be the beta

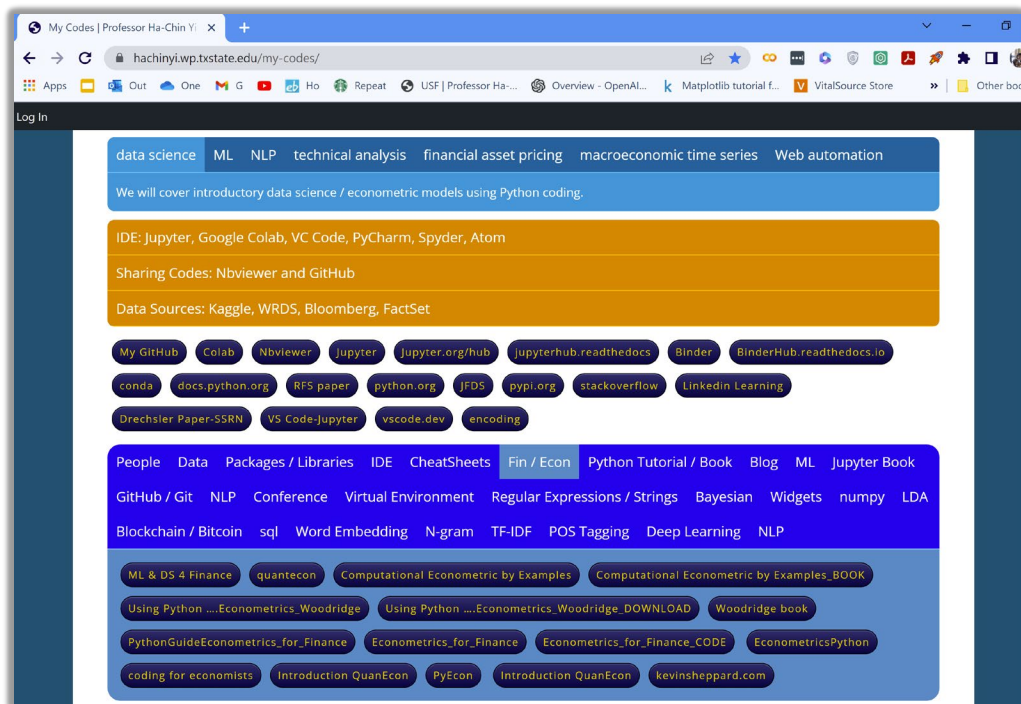
$$R_{i,t}^e = \alpha_i + \beta_i R_{m,t}^e + u_{i,t}, \quad i = 1, \dots, N; \quad t = 1, \dots, T$$

where N is the total number of stocks in the sample and T is the number of time series observations on each stock. The intercept estimate ($\hat{\alpha}_i$) from this regression would be ‘Jensen’s alpha’ for the stock, which would measure how much the stock underperformed or outperformed what would have been expected given its level of market risk. It is probably not very interesting to examine the alpha for an individual stock, but we could use exactly the same regression to test the performance of portfolios, trading strategies and so on – all we would do would be to replace the excess returns that comprise the dependent variable with those from the portfolio or trading rule.

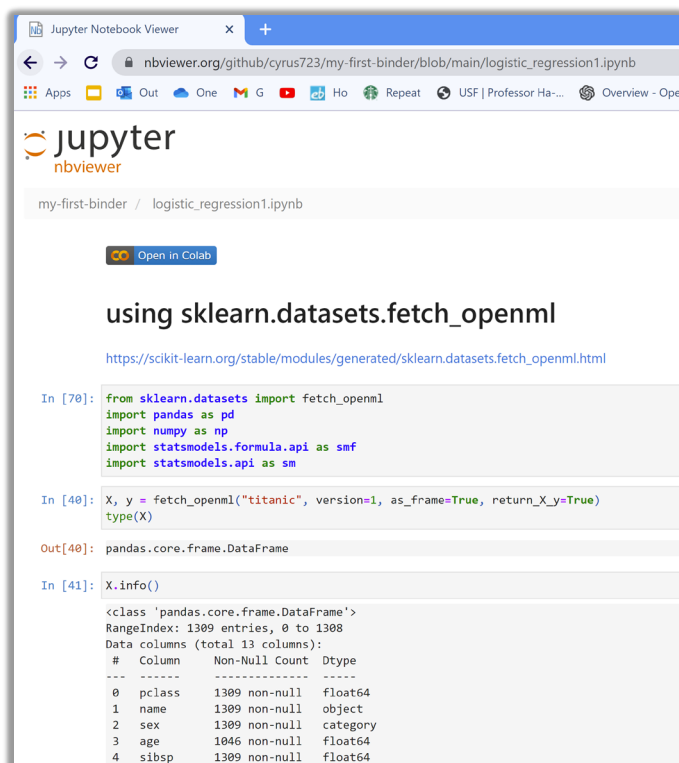
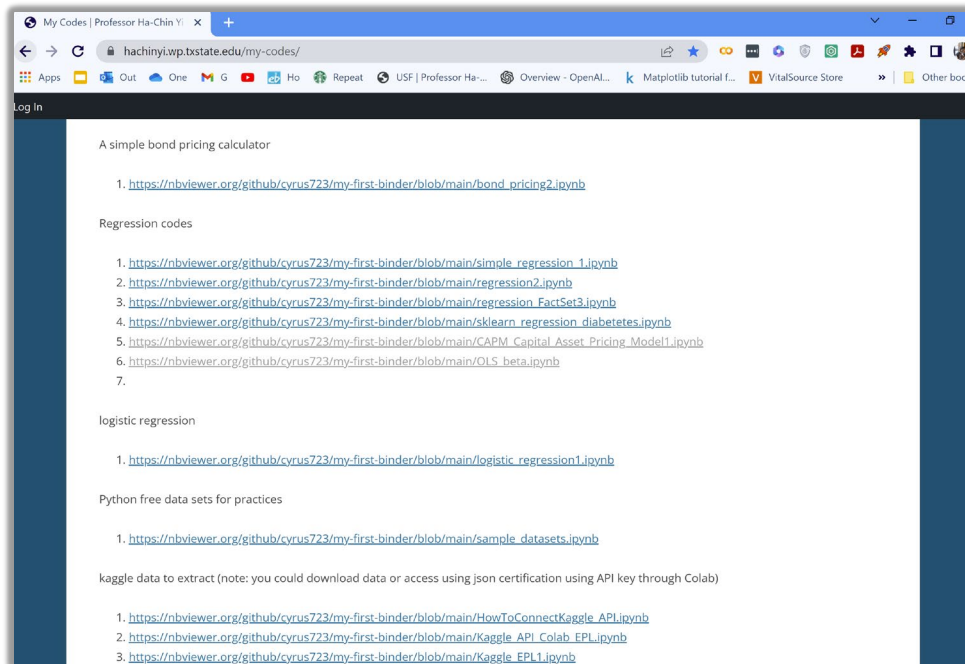
Finance is a quantitative heavy subject and I provide all important equations and models in Canvas Pages.



Using WordPress, I created my own Data Analytics page where students can access the up to date FinTech, machine learning, and other materials.



Yi, Exhibit 2.



Using Jupyter Notebook, I provide important Python codes and list them in my Page.

Exhibit 3: Former Students' Job Search Experiences

<https://hachinyi.wp.txstate.edu/advices-from-former-students/>

I reached out to my former students to get feedbacks and have them share their job search journey with the current students.

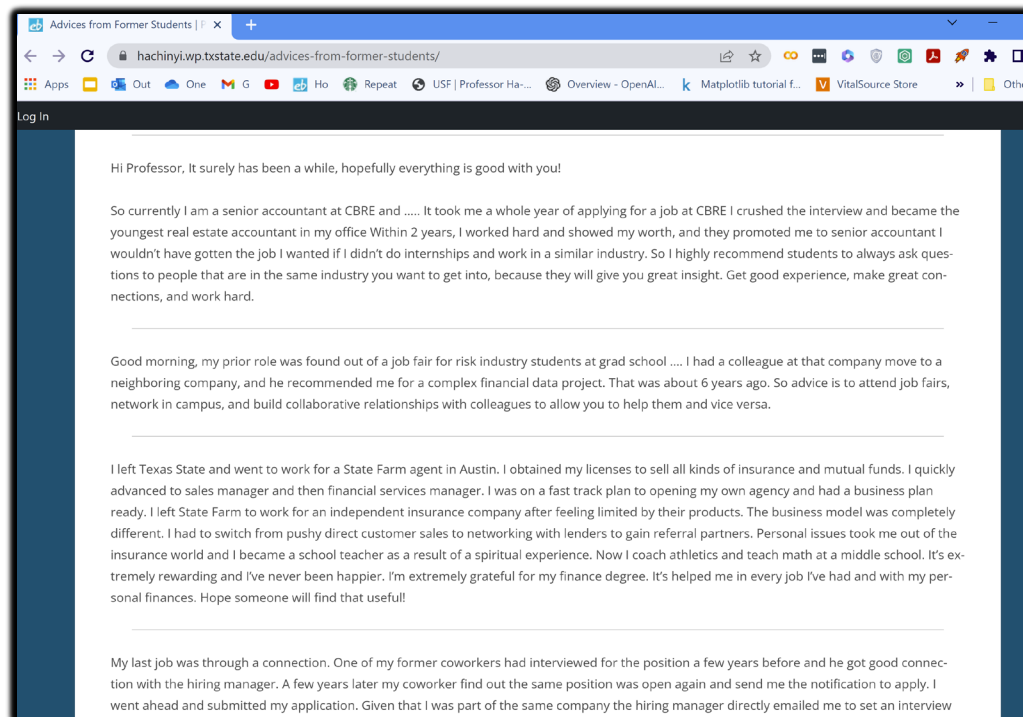
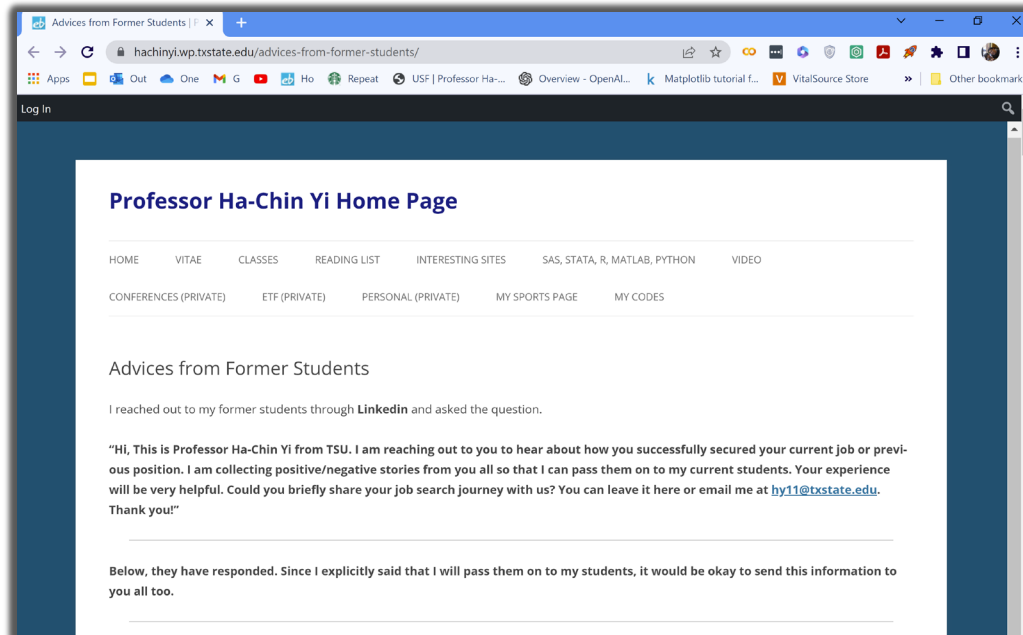


Exhibit 4: Certificates of Faculty Development



Certificates from *LinkedIn Learning*



Certificate from University of South Carolina

Exhibit 5: Internal Awards in Teaching

