

Memorandum of Agreement Form

TECHNOLOGY ENTREPRENEUR CENTER

This Memorandum of Agreement Form is for students enrolled in the course TE 401: Developing Breakthrough Projects. NOTE: Students will not be able to begin their work until this form is received by TEC Academic Services and final approval has been given.

Student Name Shihyu Ho

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Illinois Email syho2@illinois.edu

Current Year in School 1st year master's

Anticipated Graduation (SEMESTER & YEAR) Fall, 2024

Home Department Electrical and Computer Engineering

Supervisor Name _____

Supervisor Email _____ **Supervisor Phone Number** _____

Day-to-day Project Supervisor Name (if applicable) _____

Email _____ **Phone Number** _____

Company/Project Name Crypto Quant Trading Bot

Company/Project Address CryptoQuantTrading

Brief Description of the Project (attach additional pages if necessary)

Future Arbitrage is special in crypto market that once buyers buy long of spot and buy short of future, they will not have to bear the risk of price increase and decrease. On the other hand, the special mechanism of buying crypto future, buyers can earn profit when the price is expected to increase in future.

The target of this project aims to build a trading bot using crypto firm Binance API to get the data of current buying and selling price. Then I will run this strategy to backtest history dataset. Finally, the trading bot will manipulate the virtual account to test the trading strategy.

The long-term target is to build a service that can automatically doing this kind of trading to earn money.

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Scope and Content: Please list the scope, content, and skills to be obtained and/or sharpened during TE 401.

Coding : Back-end API integration, Machine learning
Finance : Arbitrage, Crypto, Candlestick chart

Which of the following leadership and/or innovative skills do you anticipate learning and/or building upon? (MUST CHECK AT LEAST 4 BOXES) You will report on your progress towards these in your midterm and final papers/projects.

- | | | |
|--|---|---|
| <input type="checkbox"/> Financing <ul style="list-style-type: none"><input type="checkbox"/> Fundraising<input type="checkbox"/> Bootstrapping<input type="checkbox"/> Grants<input type="checkbox"/> SBIR<input type="checkbox"/> Harvesting<input type="checkbox"/> Exit Strategies | <input type="checkbox"/> Operations <ul style="list-style-type: none"><input type="checkbox"/> Outsourcing<input type="checkbox"/> Manufacturing<input type="checkbox"/> Supply Chain <input checked="" type="checkbox"/> Business plan
<input checked="" type="checkbox"/> Product Development | <input type="checkbox"/> Negotiations
<input type="checkbox"/> Technology Management
<input type="checkbox"/> Business Management
<input checked="" type="checkbox"/> Project Management
<input checked="" type="checkbox"/> Intellectual Property |
| <input type="checkbox"/> Marketing <ul style="list-style-type: none"><input type="checkbox"/> Marketing Plan<input type="checkbox"/> Competitive Strategy<input type="checkbox"/> Market Research<input type="checkbox"/> Talking to Customers<input checked="" type="checkbox"/> Validating the Idea<input checked="" type="checkbox"/> Prototyping | <input type="checkbox"/> Opportunity Creation & Identification
<input type="checkbox"/> Structure of a Business <ul style="list-style-type: none"><input type="checkbox"/> Legal<input type="checkbox"/> Accounting<input type="checkbox"/> HR<input type="checkbox"/> Company Formation<input type="checkbox"/> Building a Team | <input type="checkbox"/> Social Impact and/or Grand Challenges
<input type="checkbox"/> Intrapreneurship
<input type="checkbox"/> Agile Startup
<input type="checkbox"/> Lean Startup
<input type="checkbox"/> Ethics |
| <input type="checkbox"/> Sales <ul style="list-style-type: none"><input type="checkbox"/> Distribution<input type="checkbox"/> Sales Process<input type="checkbox"/> Closing a Deal | | |

Start date Feb 1st End date of participation May 11st

Number of hours/week (average) that will be spent 12 - 16

Number of credit hours for TE 401 4

Meeting schedule (as agreed upon with TE 401 supervisor) _____

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EVALUATION OF DELIVERABLES

Describe specific course deliverables in the space below. Indicate the due date, if any, and approximate percentage of the final grade.

DELIVERABLE	DATE	GRADE %
Participation/Effort (e.g. weekly meetings, teamwork, time invested)		
Work Product (e.g. prototypes, code, data, demos, documentation)		
Midterm (e.g. report, presentation, poster)		
Final (e.g. report, presentation, poster)		

SIGNATURE

I understand the expectations of my experience to be completed at the time and location noted on this agreement. The scope, content, and deliverables have been prepared in consultation with my experiential supervisor and project supervisor. I understand that the details of my experience and the deliverables may be used in publicity and recruiting by the Technology Entrepreneur Center and/or the College of Engineering.

Student Signature Shihyu Ho **Date** 2024/01/18

APPROVALS

TE 401 Supervisor Signature _____ **Date** _____

TE 401 Day-to-Day Supervisor Signature (if applicable) _____

Date _____

OFFICE USE ONLY

Date Received _____ **Signature** _____

Comments _____

PLEASE RETURN THIS FORM TO:
tec@illinois.edu