

#### **ETH-NUS Joint Workshop**

# AI x FinTech: Bridging Innovation and Financial Insight

Jointly organized by FinsureTech Hub at ETH Zurich and Centre for Quantitative Finance at NUS

Hosted by Department of Mathematics & Institute of Mathematical Sciences Venue: Auditorium, Institute of Mathematical Sciences

Block S17, Level 3, 10 Lower Kent Ridge Road, Singapore 11907

### Thursday, 18 September 2025 – NUS Innovation & Tech Ecosystem Day

Time	Activity	
13:30–14:00	Welcome & Introduction to NUS Enterprise	
14:00-15:00	<b>Startup Showcase</b> : Presentations by 2–3 NUS FinTech/AI startups	
15:30-16:30	Visit to Prof. Lin Shao's Robotics Lab (Profile)	
16:30–17:30	Guided NUS Campus Visit and networking walk	

#### Friday, 19 September 2025 – Workshop & Hackathon Day

Time	Activity			
10:00-10:30	Opening Remarks & Hackathon Problem Setting			
	Theme: "AI Agents for the Future of Financial Decision-Making"			
	Mixed teams formed (3–5 ETH & NUS students per group, ~10 groups)			
10:30-11:00	Talk 1 (ETH Speaker)			
11:00-11:30	Talk 2 (NUS Speaker)			
11:30-12:00	Talk 3			
12:00-13:00	<b>Panel Discussion</b> : AI and FinTech — Regulation, Innovation, Risks			
13:00-14:00	Lunch Break			
14:00-15:00	Hands-on Hackathon Working Time (mentors available on site)			
15:00-15:30	Hackathon Video Presentation			
15:30–16:30	Vote and Tea Break			
16:30-17:00	Hackathon Award Ceremony & Closing Remarks			
	1-min AI video screening & Top 3 group awards			

Monday, 22 September 2025 – Industry Immersion (Company Visits in Julius Baer, Singapore Exchange, etc. By Invitation Only)





# ETH-NUS Hackathon "AI Agents for the Future of Financial Decision-Making"

- Teams: 10 groups, mixed NUS & ETH, 3–5 members
- © Task: Design a financial AI agent
- Choose 1 of 6 suggested use cases (or propose your own)
- **P** Deliverables:
  - o 2-min AI promotional video (e.g., <u>InVideo AI</u>, Pika, HeyGen)
  - o Optional: working demo or code. 2–3 slides (problem, solution, impact)
- X Awards: Top 3 teams based on relevance, creativity, clarity, and teamwork

#### **Problem Setting**

Design and prototype an AI-powered financial agent — a digital assistant, tool, or decision-support interface — that tackles a real-world challenge in financial services, capital markets, or sustainability finance.

- Each team will conceptualize and build a solution or prototype that combines AI logic (e.g. NLP, predictive models, or smart analytics) with a clear financial decision-making use case
- You will wrap up your work by creating a 1-minute promotional video, pitching your solution as if to investors, regulators, or enterprise clients.

This is a hybrid hackathon — coding is welcome but not required. Strong teams can deliver impact through mockups, design thinking, and analytics-driven storytelling.

- Example Topics (Team May Choose One or Propose Their Own)
  - 1. AI Co-Pilot for Portfolio Managers: A dashboard or chatbot that helps asset managers with allocation decisions, macro insights, or sentiment analysis. Could use LLMs or pretrained models.
  - 2. RegTech Assistant for Compliance Officers: An agent that scans through regulatory filings, transaction logs, or policy documents to flag compliance risks, e.g., insider trading suspicion.
  - 3. Personalized Credit Risk Advisor: Design a tool to predict creditworthiness using both traditional and alternative data, targeting SMEs or gig workers.
  - 4. AI-Powered Green Finance Tracker: Build a platform that verifies or scores ESG alignment of companies or bonds based on scraped news, filings, or proprietary scoring logic.





- 5. Fraud Detection in Digital Payments: Design a monitoring system using anomaly detection to flag real-time suspicious transactions across wallets or cross-border systems.
- 6. AI Agent for Real-Time FX Hedging Decisions: Provide a fast decision aid for corporates or traders in volatile markets, combining forecasts, macro signals, and cost minimization logic.

Each team defines the problem scope, users, and data logic — and shows how their agent provides meaningful insights or actions.

- Deliverables: By Friday, 19 Sep, 15:30, each team submits:
  - 1-minute AI-generated promotional video. (Upload via Google Drive or link show during award session)
  - Optional (bonus): prototype/code/demo/ 2–3 presentation slides summarizing: Problem tackled; Proposed solution; Business or technical value

## AI Video Tools (Free or Freemium Options)

Teams can choose any of the following tools to create their video:

Tool	Туре	Link
Invideo AI	AI-generated video from text	ai.invideo.io
Pika	Text-to-video animation	pika.art
Lumen5	Slide-to-video storytelling	lumen5.com
HeyGen	AI avatar/face videos	heygen.com
Canva Video	Easy animated storytelling	canva.com

✓ Video must be understandable, persuasive, and visually clear. Treat it like a mini startup pitch or product demo.

Awards: Top 3 teams will be recognized based on:

Criteria	Weight
Relevance & Innovation	30%
Technical/Business Insight	25%
Communication & Storytelling	20%
Promotion Video Creativity	15%
Team Collaboration	10%



