

HONGYU HÈ

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(Version: Sep. 2025 | Underlined content contains hyperlink)

EDUCATION

Princeton University — PhD in Electrical Engineering	Aug. 2024 – present
▶ Advisor: <u>Prof. Maria Apostolaki</u>	United States
▶ GPA: 3.95/4.0 (eight graduate-level courses in EE and CS)	
ETH Zürich — MSc in Computer Science	Aug. 2021 – Jul. 2024
▶ <u>Direct Doctoral Scholar</u> (5 out of 230 CS master's students in 2022)	Switzerland
▶ <u>Associated Researcher</u> at <u>ETH AI Center</u>	
Vrije Universiteit Amsterdam — BSc (Hons) in Computer Science	Aug. 2018 – Jul. 2021
Universiteit van Amsterdam — BSc Minor in Mathematics	Sep. 2019 – Jan. 2021
▶ GPA ranking: 1/180 (national top-10 in CS by KHMW in 2020)	The Netherlands
Tianjin University — BA in Law (unfinished)	Sep. 2016 – Aug. 2017
▶ Top 0.2% among 153,276 regional students (liberal arts) in National College Entrance Exam, " <u>Gaokao</u> "	China

RESEARCH EXPERIENCE

<u>Systems Group @ ETH</u> — MSc thesis [2] Advisor: <u>Prof. Gustavo Alonso</u>	Oct. 2021 – May 2024
<u>Serverless Simulation Project: NoServer</u> <u>Prof. Christina Delimitrou</u> , <u>Dr. Sameh Elnikety</u>	Nov. 2022 – Jan. 2023
<u>Atlarge Research</u> — BSc thesis [1] Advisor: <u>Prof. Alexandru Iosup</u>	Dec. 2018 – Jul. 2021
<u>KARMA Research</u> — Research project [3] <u>Prof. Jacopo Urbani</u>	May 2019 – Sep. 2020
<u>Elsevier Discovery Lab</u> — Research Assistant <u>Prof. Michael Cochez</u>	May 2020 – Aug. 2020

INDUSTRY EXPERIENCE*

<u>Curieo AI</u> — ML Research Fellow remote, part-time	Jul. 2024 – Oct. 2024
<u>IBM Research</u> — Engineering Intern Geodata Team part-time	Apr. 2024 – Jun 2024
<u>Apple Inc.</u> — Research Engineer Intern [5] Visual Intelligence Team (return offer)	May 2023 – Oct. 2023
<u>Oracle Labs</u> — Graal Cloud Native Intern Serverless Team part-time (return-intern offer)	Feb. 2023 – May 2023
<u>Dexter Energy Services</u> — BSc Thesis Intern	Jun. 2021 – Sep. 2021
<u>Huawei Technologies</u> (Amsterdam Research Center) — R&D Intern Search Team	Mar. 2021 – Jun. 2021
<u>Picnic Technologies</u> — Software Developer Store Team part-time	Sep. 2020 – Mar. 2021
— Backend Engineer Intern Mentor: <u>Sander Mak</u> (return offer)	Jun. 2020 – Sep. 2020

TEACHING

Princeton University 20 hrs/wk (head TA) Computer Networks	2025
ETH Zurich 14 hrs/wk Distributed Systems Lab, Big Data (<u>my session recordings</u>)	2023, 2024
Vrije Universiteit Amsterdam 8–16 hrs/wk Graph Theory, Linear Algebra, C++, Calculus I	2019, 2020

*Industry recommendations: hhy.ee.princeton.edu/rec/

TECHNICAL SKILLS

Programming & Scripting: C/C++, Python, (System)Verilog, Golang, Shell, Scala, Java, SQL, \LaTeX
Software & Tools: Kubernetes, Xilinx Vivado/Vitis suite, JAX, PyTorch, Linux, Git, Docker, Knative, Apache Spark, SLURM, STM32 (ARM Cortex-M3), MongoDB, PostgreSQL, Hadoop, HBase, Spring5, Qt5

PUBLICATIONS

Preprint

- [9] **H. Hè**, M. Apostolaki. *Making Logic a First-Class Citizen in Network Data Generation with ML*. arXiv:2506.23964
[8] M. Jin, **H. Hè**, M. Apostolaki. *Assessing User Privacy Leakage in Synthetic Packet Traces: An Attack-Grounded Approach*. arXiv:2508.11742

Peer-reviewed paper

- [7] **H. Hè**, M. Apostolaki. *Just-in-Time Logic Enforcement: A new paradigm of combining statistical and symbolic reasoning for network management*. HotNets '25
[6] A. Zhou, C. Costic, **H. Hè**, A. Ghalayini, A. Kabbani, M. Apostolaki. *Just-in-Time Logic Enforcement: A new paradigm of combining statistical and symbolic reasoning for network management*. HotNets '25
[5] B. McKinzie, Z. Gan, J. Fauconnier, ..., **H. Hè**, ..., P. Gräsch, A. Toshev, Y. Yang. *MM1: Methods, Analysis & Insights from Multimodal LLM Pre-training*. ECCV '24
(first multimodal LLM from Apple) [PDF]
[4] **H. Hè**, M. Friedman, T. Rekatsinas. *EnergAt: Fine-Grained Energy Attribution for Multi-Tenancy*. HotCarbon '23
(adopted by Trycarbonara) [PDF] [slides] [code] [media]
[3] B. Kruit, **H. He**, J. Urbani. *Tab2Know: Building a Knowledge Base from Tables in Scientific Papers*. ISWC '20.
[PDF] [slides] [code]

Degree thesis

- [2] **H. Hè**. *FPGA-based SmartNIC for Distributed Machine Learning*. 2024 (best grade: 6.0/6) [MSc thesis]
[1] **H. He**. *How Can Datacenters Join the Smart Grid to Address the Climate Crisis? Using simulation to explore power and cost effects of direct participation in the energy market*. 2021
(Amsterdam Data Science Thesis Award) [BSc thesis] [slides] [code]

OTHER ACHIEVEMENTS

- ◆ Princeton NAM Fellowship in AI 2025
- ◆ Princeton UA Fellowship in Computer Science 2024
- ◆ Nominee for [ETH Medal](#) (MSc) 2023
- ◆ [Danish Government scholarship](#) [€ 28,260] 2021
- ◆ [Leiden Excellence scholarship](#) [€ 15,000] 2021
- ◆ GRE 334 (verbal: 161, quant: 170, writing: 3) 2021
- ◆ [GLOBE scholarship](#) (ranked 1st out of 900+) [€ 1,250] 2020
- ◆ ACM-ICPC: Amsterdam Algorithm Programming Preliminaries (AAPP) with my team, ranked 1st 2020
- ◆ ACM-ICPC: Benelux Algorithm Programming Contest (BAPC) with my team, ranked 9th 2019
- ◆ [Young Talent Incentive Award](#) by [The Royal Holland Society of Sciences \(KHMW\)](#) 2019
- ◆ Ranked 1st in Operating Systems ([Prof. Cristiano Giuffrida](#)) and Networks ([Prof. Andrew Tanenbaum](#)) courses 2019

SERVICE

- **Artifact Evaluation Committee:** SOSP '23; MLSys '23; MobiSys '23; JSys '22, '23; ICPE '24
- **Tutorial Organizer:** ASPLOS '22 ([Integration of Firecracker \$\mu\$ VM](#))

LANGUAGES

English: [TOEFL](#) (speaking): 28, [IELTS](#): 9 | **German:** B1 | **Dutch:** Basic | **Mandarin:** [PSC](#): Level 1-B, regional max.