

# HONGYU HÈ

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

## EDUCATION

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

## RESEARCH EXPERIENCE

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

## INDUSTRY EXPERIENCE\*

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

## TEACHING

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

\*Industry recommendations: [hhy.ee.princeton.edu/rec/](https://hhy.ee.princeton.edu/rec/)

## TECHNICAL SKILLS

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**Programming & Scripting:** C/C++, Python, (System)Verilog, Golang, Shell, Scala, Java, SQL, L<sup>A</sup>T<sub>E</sub>X

**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

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### Preprint

- [9] M. Jin, **H. Hè**, M. Apostolaki. *Assessing User Privacy Leakage in Synthetic Packet Traces: An Attack-Grounded Approach*. arXiv:2508.11742

### Peer-reviewed paper

- [8] **H. Hè**, M. Apostolaki. *Making Logic a First-Class Citizen in Network Data Generation with ML*. USENIX NSDI '26 (to appear) [\[PDF\]](#)
- [7] **H. Hè**, M. Apostolaki. *Just-in-Time Logic Enforcement: A new paradigm of combining statistical and symbolic reasoning for network management*. ACM 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*. ACM HotNets '25
- [5] B. McKinzie, Z. Gan, J. Fauconnier, ..., **H. Hè**, ..., P. Grasch, A. Toshev, Y. Yang. *MMI: Methods, Analysis & Insights from Multimodal LLM Pre-training*. ECCV '24  
**(first multimodel 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 Thesis Award)** [\[BSc thesis\]](#)

## OTHER ACHIEVEMENTS

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- ◆ 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

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- **Artifact Evaluation Committee:** SOSP '23; MLSys '23; MobiSys '23; JSys '22, '23; ICPE '24
- **Tutorial Organizer:** ASPLOS '22 (Integration of Firecracker μVM)

## LANGUAGES

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