

# Yann Hicke

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EDUCATION	<b>Ph.D. Computer Science, Cornell University</b> (exp.) 2028 <ul style="list-style-type: none"><li>Advised by <a href="#">Claire Cardie</a> and <a href="#">Rene Kizilcec</a></li></ul> <b>M.Eng. Operations Research and Information Engineering, Cornell University</b> 2015 <b>B.S. Applied Mathematics and Industrial Engineering, Mines Nancy</b> 2014
COURSEWORK	Reinforcement Learning, Advanced Reinforcement Learning, Natural Language Processing, Machine Learning in Feedback Systems, Deep Learning, Principles of Large-Scale Machine Learning Systems, Advanced Artificial Intelligence, Deep Probabilistic and Generative Models, Advanced Language Technologies, Learning Analytics, Operating Systems, Software Engineering
RESEARCH EXPERIENCE	<b>Research Assistant, Stanford University</b> May 2023–Jul 2024 Supervised by <a href="#">Emma Brunskill</a> and <a href="#">Dora Demszky</a> <ul style="list-style-type: none"><li>Developing a contextual bandit algorithm for automatic feedback for teachers</li></ul> <b>Multimodal AI Research Intern, Educational Testing Service AI Labs</b> Jun 2023–Aug 2023 Supervised by <a href="#">Chee Wee (Ben) Leong</a> and <a href="#">Andrew Emerson</a> <ul style="list-style-type: none"><li>Developed a predictive model for stress detection in a learning environment</li></ul> <b>Research Assistant, Massachusetts Institute of Technology</b> Mar 2022–Mar 2023 Supervised by <a href="#">Iddo Drori</a> <ul style="list-style-type: none"><li>Worked on research using LLMs to solve undergraduate exam questions</li></ul> <b>Research Software Engineer, Cornell University</b> Jan 2022–May 2022 Assisted <a href="#">Ji Yong Cho</a> , supervised by <a href="#">Rene Kizilcec</a> <ul style="list-style-type: none"><li>Created an educational coaching application for online learners (iOS and Android) designed to implement strategies for reducing learner dropout rates</li></ul>
TEACHING	<b>Graduate Teaching Assistant, Cornell University</b> Jan 2023 – Present <ul style="list-style-type: none"><li>CS 4789, Introduction to Reinforcement Learning</li><li>CS 4780, Introduction to Machine Learning</li></ul>
PROFESSIONAL EXPERIENCE	<b>Software Engineer Intern, Hita AI</b> May 2024–Aug 2024 <b>Actor, Theatre</b> May 2016–Jul 2020 <b>Junior Analyst, Ecosys Group</b> Sep 2015–Mar 2016
SKILLS	Python, Pytorch, Scikit-Learn, Git, Huggingface, Docker, AWS, SQL, SLURM, C, C++
AWARDS	<b>Winner, CMU Gen AI Education and Future of Work Hackathon</b> Jun 2023–Aug 2023 <ul style="list-style-type: none"><li>Won \$20k as part of an LLM Hackathon hosted by Carnegie Mellon University</li></ul>
ACADEMIC SERVICE	<ul style="list-style-type: none"><li>Reviewer: Neurips GAIED 2023, AAI2024 AI for Education</li><li>Student volunteer: Learning at Scale 2022</li></ul>

- PUBLICATIONS
- [1] Y Hicke\*, J Yun\*, M Olson, D Demszky, "Enhancing Tutoring Effectiveness Through Automated Feedback: Preliminary Findings from a Pilot Randomized Controlled Trial on SAT Tutoring" *Proceedings of the Eleventh ACM Conference on Learning@ Scale*, 422-426 [\[paper\]](#)
  - [2] J Lee, Y Hicke, R Yu, C Brooks, RF Kizilcec, "The life cycle of large language models in education: A framework for understanding sources of bias" *British Journal of Educational Technology* 55 (5), 1982-2002 [\[paper\]](#)
  - [3] Yann Hicke\*, Anmol Agarwal\*, Christina Ma\*, Paul Denny, "ChaTa: Towards an Intelligent Question-Answer Teaching Assistant using Open-Source LLMs", *NeurIPS'23 Workshop: Generative AI for Education (GAIED)*, 2023 [\[paper\]](#)
  - [4] Yann Hicke, Abhishek Masand, Wentao Guo, Tushaar Gangavarapu, "Assessing the efficacy of large language models in generating accurate teacher responses", *ACL, Innovative Use of NLP for Building Educational Applications Workshop*, 2023 [\[paper\]](#)
  - [5] Yann Hicke, Tonghua Tian, Karan Jha, Frank Kim, "Automated Essay Scoring in Argumentative Writing: DeBERTeachingAssistant", *LAK'23: Workshop on Partnerships for Cocreating Educational Content*, 2023 [\[paper\]](#)
  - [6] Iddo Drori, ..., Yann Hicke, ..., Madeleine Udell, "From Human Days to Machine Seconds: Automatically Answering and Generating Machine Learning Final Exams", *International Conference on Knowledge Discovery and Data Mining (KDD)*, 2023 [\[paper\]](#)
  - [7] Iddo Drori, ..., Yann Hicke, ..., Armando Solar-Lezama, "A dataset for learning university STEM courses at scale and generating questions at a human level", *Educational Advances in Artificial Intelligence (EAAI)*, 2023 [\[paper\]](#)
  - [8] Vitali Petsiuk, ..., Yann Hicke, ..., Iddo Drori, "Human Evaluation of Text-to-Image Models on a Multi-Task Benchmark", *NeurIPS Workshop on Human Evaluation of Generative Models (HEGM)*. Oral, 2022 [\[paper\]](#)