APPLICATION FOR TUTORIAL & WORKSHOP ATTENDANCE

NBER Tutorial on Digital Economics and Artificial Intelligence

Stanford University | January 20–22, 2027

1. Contact Information

Applicant Name:	Huu Phu Nguyen
Current Affiliation:	Faculty of Management, Economics and Social Sciences, University of Cologne
Program of Study:	M.Sc. in Economic Research (Doctoral-Track Coursework Phase)
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2. Course of Graduate Study Pursued & PhD Enrollment

Doctoral-Track Status: M.Sc. in Economic Research (Ph.D.-Track Qualifying Program), Cologne Graduate School of Management, Economics and Social Sciences (CGS), University of Cologne (October 2025 – Present).

Enrollment Stage & Equivalence: Currently enrolled in the 3rd semester (Year 2). Under the European structured doctoral curriculum, this intensive two-year coursework phase is the direct equivalent of the first two years of U.S. doctoral coursework, completing all core qualifying theoretical and econometric sequences before dissertation advancement.

Academic Standing & Performance: Completed 66 ECTS with an overall GPA of 1.4 (German scale: 1.0 – 1.5: Excellent). Ranked as a top incoming scholarship recipient in the Economic Research cohort.

Completed Doctoral-Level Coursework & Core Sequences:

- **Core Microeconomic Theory:** Advanced Microeconomics I (Grade: 1.0/1.0, Prof. Dr. Johannes Münster) — General equilibrium, game theory, mechanism design, and information economics.
- **Computational Methods & Macro:** Computational Methods (Grade: 1.0/1.0, Dr. Dongho Kang) — Dynamic programming, endogenous grid methods, numerical solution of RBC models.
- **Advanced Econometrics & Methods:** Advanced Econometrics I (Theory & Applied, Grade: 1.7/1.0, Prof. Dr. Jörg Breitung); Experimental Methods (Grade: 1.7/1.0, Prof. Dr. Christopher Roth); Advanced Mathematics for Economists (Grade: 1.3/1.0, Prof. Dr. Martin Barbie).
- **Digital Economy, AI & Field Electives:** Generative AI for Data Science / Empirical Methods II (Grade: 1.3/1.0, Prof. Dr. Tom Zimmermann); Frictions, Technology, and Inequality (Grade: 1.0/1.0, Prof. Dr. Peter Funk) — Technical change, task models of automation, and labor market impacts; Political Economy & Media Economics (Grade: 2.0/1.0, Prof. Dr. Johannes Münster); Comparative Political Economy (Grade: 1.0/1.0).

3. Research Interests & Current Projects

Primary Research Fields:

Digital Economics & Platform Markets, Economics of Artificial Intelligence, Information Economics, and Economic History.

Current Research Projects in Process:

1. The Toy Story: Gender and Race in American Toys, 1896–2017

Joint work with Dr. Guohui Jiang (University of Cologne) and Assistant Professor Gabriele Patete (University of the Balearic Islands)

This project constructs a granular longitudinal panel spanning over 120 years of retail catalog offerings (1896–2017) to study product differentiation, gender/racial targeting, and price dynamics in the American retail toy market. I designed and deployed an end-to-end computer vision and Large Multimodal Model (LMM) pipeline combining object detection and multimodal LLMs via Google Cloud Vertex AI to extract commodity blocks, transcribe catalog texts, and classify product attributes across hundreds of thousands of historical catalog pages. We analyze how evolving cultural shifts, media consolidation, and demographic transitions shaped targeted retail product assortments over a century.

3. Crowd-sourced Moderation, Algorithmic Filtering, and Generative AI

Independent Research Agenda / Seminar Paper in Media Economics (Prof. Dr. Johannes Münster)

Examining the supply-side dynamics of voluntary public goods provision when autonomous generative systems enter decentralized platform moderation. The project investigates whether algorithmic fact-checkers crowd out human contributors on X's Community Notes, distinguishing between reductions in overall participation volume and losses in public visibility. Utilizing staggered cross-language API rollouts and request-feed competition data, it analyzes how scarce rater attention and consensus-based filtering mechanisms alter volunteer persistence, visible slot allocation, and equilibrium fact-checking coverage.

Motivation for Attending the NBER Tutorial:

Attending the NBER Tutorial on Digital Economics and Artificial Intelligence at Stanford University will provide direct engagement with frontier research methodologies in digital platform economics, algorithmic pricing, generative AI market equilibria, and foundation model applications in economics. Interacting with leading faculty and peers will crucially inform the empirical design and theoretical framing of my ongoing research projects as I transition from advanced coursework into full dissertation research.