

## Matthew Shou-Chung Shum

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### PERSONAL

Birthdate: February 21, 1970

### EDUCATION AND EMPLOYMENT

Stanford University, Economics, Ph.D 1998 (Supervisor: Frank A. Wolak)  
Union Bank of Switzerland (Zürich, Switzerland), Research analyst, 1992–1993  
Columbia University, Economics, B.A. 1992

### ACADEMIC APPOINTMENTS

California Institute of Technology, Division of Humanities and Social Sciences, Professor, 2008–present

Johns Hopkins University, Department of Economics, Professor, 2008; Associate professor (with tenure), 2004–2008; Assistant professor 2000–2004

University of Toronto, Department of Economics, Assistant professor, 1998–2000

### RESEARCH

#### Publications:

1. “The Value of Information in the Court: Get it Right, Keep it Tight” (with Matias Iarycowzer, Princeton). *American Economic Review*, forthcoming.
2. “Estimating first-price auctions with an unknown number of bidders: A misclassification approach” (with Yonghong An and Yingyao Hu). *Journal of Econometrics*, Vol. 157, pp. 328–341 (2010).
3. “Do Sales Tax Credits Stimulate the Automobile Market?” (with J. Chen and S. Esteban). *International Journal of Industrial Organization*, Vol. 28, pp. 397–402 (2010).
4. “Estimating a Tournament Model of Intra-firm Wage Differentials” (with Jiawei Chen, UC-Irvine). *Journal of Econometrics*, Vol. 155, pp. 39–55 (2010).
5. “Pairwise-Difference Estimation of a Dynamic Optimization Model” (with H. Hong). *Review of Economic Studies*, Vol. 77, pp. 273–304 (2010).

6. “Do Mergers Improve Information? Evidence from the Loan Market” (with F. Panetta and F. Schivardi). *Journal of Money, Credit, and Banking*, Vol. 41, pp. 673-709 (2009).
7. “Estimation Biases of Omitting Durability” (with Jiawei Chen and Susanna Esteban). *Journal of Econometrics*, Vol. 147, pp. 247-257 (2008).
8. “Durable Goods Oligopoly with Secondary Markets: the Case of Automobiles,” with S. Esteban. *RAND Journal of Economics*, Vol. 38, pp. 332-354 (2007).
9. “Likelihood Ratio Tests between Parametric and Moment Condition Models” (with X. Chen and H. Hong). *Journal of Econometrics*, 141: 109-140 (2007).
10. “Detecting Information Pooling: Analysts’ Forecasts After Brokerage Firm Mergers” (with Serena Ng). *The B.E. Journal of Economic Analysis & Policy*, Volume 7, Issue 1, Article 60 (2007).
11. “Nonlinear Pricing with Self-Control Preferences” (with S. Esteban and E. Miyagawa). *Journal of Economic Theory*, 135: 206–338 (July 2007).
12. “Monopoly Quality Degradation in Cable Television” (with G. Crawford). *Journal of Law and Economics*, 50: 181-219 (February 2007).
13. “Using Price Distributions to Estimate Search Costs” (with H. Hong). *RAND Journal of Economics*, 37: 257–275 (Summer 2006).
14. “Learning and Experimentation in Pharmaceutical Demand,” with G. Crawford. *Econometrica*, 73: 1137–1174 (July 2005).
15. “An Empirical Model of Learning and Spillovers in New Drug Entry,” with A. Coscelli. *Journal of Econometrics*, 122: 213–246 (October 2004).
16. “The Effects of Advertising in Brand Loyal Markets: the Case of Breakfast Cereals.” *Journal of Economics and Management Strategy*, 13: 241–272 (Summer 2004).
17. “Rates of Information Aggregation in Common Value Auctions,” with H. Hong. *Journal of Economic Theory*, 116: 1–40 (May 2004).
18. “Empirical Likelihood-Based Model Selection Criteria for Moment Condition Models,” with H. Hong and B. Preston. *Econometric Theory*, 19:923-943 (December 2003).
19. “Econometric Models of Asymmetric Ascending Auctions,” with H. Hong, *Journal of Econometrics*, 112: 327–358 (February 2003).
20. “Increasing Competition and the Winner’s Curse: Evidence from Procurement,” with H. Hong, *Review of Economic Studies*, 69: 871–898 (October 2002).
21. “Structural Estimation of Auction Models,” with H. Hong, 1999. In *Game Practice: Contributions from Applied Game Theory*, ed. Jurado, Tijs, Patrone. Kluwer Publishing Co.

### **Working Papers:**

1. “Intimidation or Impatience? A Field Experiment of Jump Bidding in On-line Ascending Auto-

mobile Auctions” (with David Grether and David Porter)

2. “Money in Judicial Politics: Do Campaign Contributions lead to Worse Judging?” (with Matias Iaryczower)

3. “Nonparametric Identification of Dynamic Models with Unobserved State Variables” (with Yingyao Hu). Submitted.

4. “How Much Competition is a Secondary Market?” (with Jiawei Chen and Susanna Esteban). Revision submitted.

5. “Nonparametric Tests for Common Values in First-Price Sealed-bid Auctions” (with P. Haile and H. Hong). NBER working paper #10105. Revise and resubmit.

6. “Nonparametric Learning Rules from Bandit Experiments: the Eyes have It!” (with Yingyao Hu and Yutaka Kayaba). Revise and resubmit.

7. “To Elect or to Appoint? Bias, Information, and Responsiveness of Bureaucrats and Politicians” (with Matias Iaryczower and Garrett Lewis, Caltech). Submitted.

8. “Revealed Preference Tests using Supermarket Data: the Money Pump” (with Federico Echenique and SangMok Lee). Revision submitted.

9. “Interactive Fixed Effects in the BLP Random Coefficients Demand Model” (with Roger Moon and Martin Weidner, USC). Revise and resubmit.

10. “The Revealed Preference Theory of Stable and Extremal Stable Matchings” (with Federico Echenique, SangMok Lee, and Bumin Yenmez). Submitted

11. “Nonparametric Identification of Auction Models with Non-Separable Unobserved Heterogeneity” (with Yingyao Hu and David McAdams). Submitted.

12. “A Simple Estimator for Dynamic Models with Serially-Correlated Unobservables” (with Yingyao Hu and Wei Tan). Submitted.

13. “Horizontal Mergers of Online Firms: Structural Estimation and Competitive Effects” (with Yonghong An, Mike Baye, Yingyao Hu, and John Morgan).

**Work in progress:**

1. “Partial Identification in Matching Models” (with Federico Echenique and SangMok Lee)

2. “Testing for Efficiency in a Multilateral Trading Market” (with Jason Allen, James Chapman, and Federico Echenique)

3. “Seller Strategy in Tea Auctions in Chittagong” (with Tanjim Hossain and Fahad Khalil)

4. “Identifying Dynamic Games with Serially-Correlated Unobservables” (with Yingyao Hu)

5. “How Optimal are Credit Card Offers? A Comparison of Randomized and Non-randomized Offers” (with Wei Tan)

6. “Empirical Models of Endogenous Quality Choice: the Case of Cable TV” (with G. Crawford)

7. “Informative Advertising and Bad News in a Pharmaceutical Market: the Case of *Crestor*” (with Wei Tan)

## **EDITORIAL ACTIVITIES**

Co-editor, *International Journal of Industrial Organization*, 2005-2008

## **GRANTS AND AWARDS**

1. *Empirical Analyses of Committee Voting*, grant from the National Science Foundation (SES-1061266, joint with Matias Iaryczower), 2011-2013

2. *Empirical Analyses of Competitive Bidding*, grant from the National Science Foundation (SES-0003352, joint with Han Hong), 2000-2003

3. *Empirical Analyses of Competitive Bidding*, grant from SSHRC (Social Sciences and Humanities Research Council of Canada), 2000

4. Alfred P. Sloan Dissertation Fellowship (1997–98)

## **STUDENT SUPERVISION**

### **Major supervisory role:**

Jiawei Chen (UC Irvine)

Joe Chen (National Chengchi University, Taiwan)

Wendy Chi (National Taiwan University)

Sunghwan Kim (Ajou University, Korea)

Viplav Saini (Oberlin College)

Daniel Stone (Oregon State)

Ayako Suzuki (Waseda University)

Wei Tan (SUNY Stony Brook)

Migiwa Tanaka (Hong Kong University of Science and Technology)

Wei Xiao (Fannie Mae)

### **Subsidiary advising role:**

Alena Bicakova (European University Institute, Florence)

Yihsu Chen (UC Merced, School of Engineering)

Berna Demiralp (Old Dominion University)

Marie Rekkas (Simon Fraser University)

Jennifer Roff (Queens College)

## **PROFESSIONAL ACTIVITIES**

### **Recent Conferences:**

**2010:** Cowles Summer Conference (Yale University); Triennial Choice Symposium (Key Largo,

FL); CAPCP Conference (Penn State)

**2009:** EIEF Conference on Productivity and Industrial Dynamics (Rome, Italy), Stanford Institute of Theoretical Economics, All-UC Econometrics Conference (Riverside, CA)

**2008:** Cowles Foundation Summer Conference on Identification (Yale University); CAPCP Auction Conference (Penn State); ERID Conference on Identification (Duke University); Toulouse Workshop in Structural Econometrics

**2007:** All-China IO/Antitrust Summer School (Beijing University, China); Stanford Institute of Theoretical Economics

**2006:** Dartmouth-Tuck IO Conference; Numerically Intensive Economic Policy Analysis Conference (Queen's University, Canada); Yale Center for Consumer Insights Conference

**Recent Seminar Presentations:**

**2011:** Vanderbilt, Ohio State, UC-Irvine, Chapman University, National University of Singapore

**2010:** UC-San Diego, University of Washington (Seattle), UCLA, Northwestern (Kellogg), Bank of Canada, University of British Columbia

**2009:** UC-Davis, Vanderbilt, Claremont-McKenna, University of Pennsylvania

**2008:** Penn State, NYU, Wisconsin, UC Berkeley (Marketing), USC, National University of Singapore, Harvard/MIT

**2007:** California Institute of Technology, Brown University, University of Iowa, North Carolina State University, Drexel University, UC-Irvine, Stanford Business School

**2006:** University of Minnesota, University of Virginia, University of Illinois, University of Chicago, Federal Reserve Board, Hong Kong University, Hong Kong University of Science and Technology, Shanghai University of Finance and Economics

**Recent refereeing activity:** *American Economic Review* (Excellence in refereeing award, 2008), *Econometrica*, *Journal of Econometrics*, *Journal of Political Economy*, National Science Foundation, *RAND Journal of Economics*, *Review of Economic Studies*

**Languages:** English (native), German, Chinese (Cantonese), Spanish (reading)

*Updated: May 18, 2011*