https://sites.google.com/site/lifei1019/home fei@sas.upenn.edu

#### UNIVERSITY OF PENNSYLVANIA

Placement Director: Iourii Manovskii MANOVSKI@ECON.UPENN.EDU 215-898-6880 Placement Director: Andrew Postlewaite APOSTLEW@ECON.UPENN.EDU 215-898-7350 Graduate Student Coordinator: Kelly Quinn KQUINN @ ECON.UPENN.EDU 215-898-5691

### **Office Contact Information**

**Home Contact Information** Department of Economics 4401 Spruce Street University of Pennsylvania Apartment 402 3718 Locust Walk Philadelphia, PA 19104

Philadelphia, PA 19104 Mobile: (+1)215-684-9010

**Personal Information:** Citizenship: China, P.R.; US Visa Status: F-1.

### **Undergraduate Studies**:

B.E., Material Science, University of Science and Technology Beijing, China, 2004

### **Master Level Studies**:

M.A., Economics, Peking University, Excellent Graduate Student, China, 2008

#### **Graduate Studies**:

University of Pennsylvania, 2008 to present

Thesis Title: "Essays on Information and Learning in Markets"

Expected Completion Date: May 2013

Thesis Committee and References:

Professor George Mailath (Chair) **Professor Hanming Fang** Department of Economics Department of Economics University of Pennsylvania University of Pennsylvania

3718 Locust Walk, Philadelphia, PA 19104 3718 Locust Walk, Philadelphia, PA 19104

215-898-7908 215-898-7350

gmailath@econ.upenn.edu hanming.fang@econ.upenn.edu

Professor Guido Menzio Professor Mallesh Pai Department of Economics Department of Economics University of Pennsylvania University of Pennsylvania

3718 Locust Walk, Philadelphia, PA 19104 3718 Locust Walk, Philadelphia, PA 19104

773-865-6337 215-898-5735

gmenzio@econ.upenn.edu mallesh@econ.upenn.edu

# **Teaching and Research Fields**:

Primary fields: Applied Microeconomic Theory, Game Theory, Search and Matching Theory Secondary fields: Industrial Organization, Labor Economics

#### **Teaching Experience:**

Summer 2011 Introductory Microeconomics, UPenn, Instructor

| Spring 2011 | Industrial Organization, UPenn, TA for Professor Xun Tang              |
|-------------|--|
| Fall 2010   | Public Finance, UPenn, TA for Professor Hanming Fang                   |
| Fall 2010   | Urban Fiscal Policy, UPenn, TA for Professor Holger Sieg               |
| Summer 2010 | Introductory Microeconomics, UPenn, Instructor                         |
| Spring 2010 | Introductory Macroeconomics, UPenn, Recitation Instructor              |
| Fall 2009   | Economics for Business, UPenn, Recitation Instructor                   |
| Fall 2007   | Information and Incentives, Peking Univ., TA for Professor Hongbin Cai |
| Spring 2007 | Graduate Micro. Theory II, Peking Univ., TA for Professor Jie Ma       |

### **Research Experience and Other Employment:**

| Spring 2012 | External Reviewer, Research Grants Council, Hong Kong                       |
|-------------|---|
| Winter 2010 | Research Assistant for Professor Xun Tang, UPenn                            |
| Spring 2010 | Research Assistant for Professor Santosh Anagol, Wharton School of Business |

# **Professional Activities**

# **Conference and Workshop Presentations:**

| Conference and | vvoi kshop i i eschtations.   |
|----------------|---|
| 2011           | Royal Economic Society Conference, London                           |
|                | Asian Meeting of the Econometric Society, Seoul                     |
|                | Search and Matching Workshop at the Philadelphia Fed., Philadelphia |
|                | Fall Midwest Economic Theory Conference, Nashville                  |
| 2012           | North American Winter Meeting of the Econometric Society, Chicago   |
|                | Spring Midwest Economic Theory Conference, Bloomington              |
|                | North American Summer Meeting, Evanston                             |
|                |   |

Fourth World Congress of the Game Theory Society, Istanbul

Fourth World Congress of the Game Theory Society, Island

EconCon 2012, Princeton

Fall Midwest Economic Theory Conference, St. Louis

#### Referee for:

International Economic Review, Journal of Economics & Management Strategy, Journal of the European Economic Association, and Journal of Public Economics

# Honors, Scholarships, and Fellowships:

| 2012-2013 | School of Arts and Sciences Dissertation Completion Fellowship, University of |
|-----------|---|
|           | Pennsylvania  |
| 2012      | Judith Rodin Fellowship, University of Pennsylvania                           |
| 2011-2012 | Sidney Weintraub Memorial Fellowship, University of Pennsylvania              |
| 2008-2011 | University Fellowship, University of Pennsylvania                             |
| 2007      | Excellent Graduate, Peking University   |
| 2007      | Dean's Award for Study Excellence, Peking University                          |

#### **Publications:**

"Directed Search and Job Rotation" (joint with Can Tian), forthcoming in the Journal of Economic Theory

**Abstract**. We consider the impact of job rotation in a directed search model in which firm sizes are endogenously determined, and match quality is initially unknown. In a large firm, job rotation allows the firm to at least partially ameliorate losses from mismatches of workers to jobs. As a result, in the unique equilibrium, large firms have higher labor productivity and lower separation rates. In contrast to the standard directed search model with multi-vacancy firms, this model can generate a positive correlation between firm size and wage without introducing exogenous productivity shocks or a non-concave production function.

# **Research Papers:**

"Revenue Management Without Commitment" (Job Market Paper, joint with Francesc Dilme)

**Abstract.** We consider a market with a profit-maximizing monopolist seller who has K identical goods to sell before a deadline. At each date, the seller posts a price and the quantity available but cannot commit to future offers. Over time, potential buyers with different reservation values enter the market. Buyers can strategically time their purchases, trading off (1) a possibly lower price in the future with the risk of being rationed and (2) the current price without competition. We analyze equilibrium price paths and buyers' purchase behavior. We show that incentive compatible price paths decline smoothly over the time period between sales and jump up immediately after a transaction. In equilibrium, high value buyers purchase immediately on arrival. Crucially, before the deadline, the seller may periodically liquidate part of his stock via a fire sale to secure a higher price in the future. Intuitively, these sales allow the seller to 'commit' to high prices going forward. The possibility of fire sales before the deadline implies that the allocation may be inefficient. The inefficiency arises from the scarce good being misallocated to low value buyers, rather than the withholding inefficiency that is normally seen with a monopolist seller.

"On the Continuous Equilibria of Affiliated-Value, All-Pay Auctions with Private Budget Constraints," (joint with Maciej Kotowski), R&R at Games and Economic Behavior

**Abstract.** We consider all-pay auctions in the presence of interdependent, affiliated valuations and private budget constraints. For the sealed-bid, all-pay auction we characterize a symmetric equilibrium for the case of N players and we investigate the equilibrium's comparative static properties. The introduction of budget constraints serves to encourage more aggressive bidding among bidders with large endowments and intermediate valuations. We extend our results to the war of attrition where we show that budget constraints lead to a uniform amplification of equilibrium bids. An example shows that with both interdependent valuations and private budget constraints, a revenue ranking between the two mechanisms is generally not possible.

"Dynamic Education Signaling with Dropout" (joint with Francesc Dilme), R&R at American Economic Journal: Microeconomics

**Abstract**. We present a dynamic signaling model where wasteful education takes place over several periods. Workers pay an education cost per period and cannot commit to a fixed education length. Workers face an exogenous dropout risk before graduation. Since low-productivity workers' cost is high, pooling with early dropouts helps them to avoid a high education cost. In equilibrium, low-productivity workers choose to endogenously drop out over time, so the productivity of workers in college increases along the education process. We find that (1) wasteful education signals exist even when job offers are privately made and the length of the period is small, (2) the maximum education length is decreasing in the prior about a worker being highly productive, and (3) the joint dynamics of returns to education and the dropout rate are characterized, which is consistent with previous empirical evidence.

"Bargaining While Learning About New Arrivals" (joint with Chong Huang)

**Abstract.** We study dynamic bargaining with uncertainty over the buyer's valuation and the seller's outside option. A long-lived seller makes offers to a long-lived buyer whose value is private information. There may exist a short-lived buyer, whose value is higher than that of the long-lived buyer. The arrival of a short-lived buyer, if she exists, is determined by a Poisson process. We characterize the unique perfect Bayesian equilibrium. The equilibrium displays price fluctuations: in some periods, the seller charges a high price unacceptable to the long-lived buyer, in the hope that the short-lived buyer appears in that period; in the other periods, he offers a price attractive to some values of the long-lived buyer. The price dynamics result from the interaction between two learning processes: exogenous learning about the existence of short-lived buyers, and endogenous learning about the long-lived buyer's value.

# "Efficient Learning and Job Turnover in Labor Markets"

**Abstract**. This paper studies the aggregate consequences of individual learning in the labor market. I examine this issue in a model of directed search on the job. Once matched, a firm-worker pair gradually learns the match-specific quality, taking the realized history of production performance as a signal. Heterogeneity in job search behavior among workers naturally occurs, resulting from a variety of individual histories. I first solve the social planner's problem and describe the efficient learning and searching strategy, I then implement the efficient allocations through a market mechanism. Consistent with the stylized facts, the model predicts a decreasing on-the-job search probability over tenure, and a hump shaped separation-tenure relation resulting from the interaction between the selection effect and the adjustment of the on-the-job search strategy of employees.