

Pu Yang

CONTACT INFORMATION	292 Rhodes Hall Ithaca, NY 14850 USA	607-379-3154 py75@cornell.edu
EDUCATION	Cornell University , Ithaca, NY Ph.D, Operations Research and Information Engineering, 2014.8 - Present, GPA: 4.2/4.3 <ul style="list-style-type: none">• Advisor: Prof. Peter Frazier(joint with Prof. Krishnamurthy Iyer)• Minor: <i>Computer Science, Applied Mathematics</i> Cornell University , Ithaca, NY M.Eng, Operations Research and Information Engineering, 2012.8 - 2014.1, GPA: 4.0/4.3 Peking University , Beijing, China B.Economics, Economics(Double Major Program), 2009.9 - 2012.6, GPA: 3.7/4.0 Tsinghua University , Beijing, China B.Eng, Electronics Engineering, 2007.8 - 2011.7, GPA: 3.5/4.0	
RESEARCH EXPERIENCE	School of Operations Research and Information Engineering, Cornell University <i>Research Assistant</i> <ul style="list-style-type: none">• Incentivizing Exploration and Information Sharing.<ul style="list-style-type: none">- Develop a theoretical understanding of agents' behavior in a large network with nodes associated with stochastic rewards varying with time.- Design mechanisms to incentivize agents to explore the network and share information to increase agents' total welfare(future work).- A direct application is incentivizing taxi drivers to explore their city and share information about customers' locations.• Sequence Optimization Using Optimal Learning<ul style="list-style-type: none">- Formulate biological sequence optimization problems as an active learning problem.- Proposed a greedy based optimal learning method that reduces the original problem to a mixed-integer nonlinear programming(MINLP) problem under mild statistical assumptions, and proved performance guarantee for submodular metrics.	2013.6 - Present
PUBLICATIONS	<ol style="list-style-type: none">1. P. Yang, K. Iyer, P. Frazier, <i>Incentivizing exploration and information sharing in large networks</i>, work in progress.2. J. Wang, M. Burkart, P. Frazier, N. Gianneschi, M. Gilson, N. Kosa, L. Tallorin, P. Yang, <i>Finding short peptide substrates using Bayesian Active Learning</i>, work in progress.3. L. Tallorin, J. Wang, N. Kosa, P. Yang, M. Thompson, S. Sahu, J. Yin, M. Gilson, N. Gianneschi, P. Frazier, M. Burkart, <i>Peptide Optimization by Optimal Learning(POOL): Identification and refinement of peptides for reversible chemoenzymatic labeling</i>, work in progress.	
INVENTION DISCLOSURES	<ol style="list-style-type: none">1. M. Burkart, P. Frazier, N. Gianneschi, N. Kosa, L. Tallorin, J. Wang, P. Yang, <i>Sequence Optimization by Optimal Learning</i>. Docket No.6941 at Cornell Center for Technology Enterprise and Commercialization(CCTEC).	
TEACHING EXPERIENCE	<ul style="list-style-type: none">• ORIE4740: Statistical Data Mining, Spring 2015, <i>Teaching Assistant</i>.• ORIE3500: Probability and Statistics, Fall 2014, <i>Teaching Assistant</i>.• ORIE4580: Simulation, Fall 2013, <i>Teaching Assistant</i>.	
SELECTED COURSEWORKS	Mathematical Programming, Stochastic Process, Statistical Theory, Measure and Probability Theory, Functional Analysis, Optimization Methods, Convex Analysis, Algorithms, Machine Learning, Probabilistic Graphical Models.	
SKILLS	<ul style="list-style-type: none">• Languages: R, Python, Java(familiar); C/C++, Matlab(experienced); SQL(basic).• Optimization Tools: Experienced with AMPL, CPLEX, Gurobi.• Miscellaneous: Experienced with Linux shell scripting; L^AT_EX; Git/Bitbucket.	
HONORS & AWARDS	<ul style="list-style-type: none">• Finalist, INFORMS Data Mining Best Student Paper, 2014 for J. Wang, M. Burkart, P. Frazier, N. Gianneschi, M. Gilson, N. Kosa, L. Tallorin, P. Yang, <i>Finding short peptide substrates using Bayesian Active Learning</i>. 2014• 21-Group Scholarship for Academic Excellence, Peking University. 2011• Scholarship for Outstanding Freshman, Tsinghua University. 2008• First Prize in Chinese Mathematics Competition for High School Students. 2006	