## Akang Wang

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### Education

Ph.D., Chemical Engineering, Carnegie Mellon University, Pittsburgh, PA

Sept. 2015 - present

- Thesis Title: "Optimization of Vehicle Routing Problems under Uncertainty"
- Advisor: Chrysanthos E. Gounaris
- GPA: 3.94/4.00

B.S., Chemical Engineering, Tianjin University, Tianjin, China

Sept. 2011- Jul. 2015

- Thesis Title: "The Bioinspired Fabrication, Modification and Application of Fiber-Optical SPR Sensors"
- Thesis Advisor: Rongxin Su
- GPA: 3.85/4.00

B.A., Finance, Nankai University, Tianjin, China

Mar. 2013- Jul. 2015

- Thesis Title: "The Study on Diversification of China's Foreign Exchange Reserve"
- Thesis Advisor: Fenglong Gao

## Research Experience

Ph.D. Research, Carnegie Mellon University, Chrysanthos E. Gounaris

Sept. 2015 - present

- Developed a customized Branch-and-Bound approach for nesting problems
- Built a branch-price-and-cut algorithm for vehicle routing problems
- Cultivated a dynamic programming method for SPPRC

Senior Thesis Research, Tianjin University, Rongxin Su

Dec. 2014 – Jun. 2015

## Honors & Awards

James C. Meade Graduate Fellowship, Carnegie Mellon University	<i>Dec.2016</i>
Institutional Honor, Tianjin University	<i>Jul. 2015</i>
Shanghai Pudong Development Bank Endeavour Fellowship, Tianjin University	<i>Dec.</i> 2014
National Scholarship, Ministry of Education of the People's Republic of China	<i>Dec.</i> 2013
Shanghai Pudong Development Bank Scholarship, Tianjin University	<i>Dec.</i> 2012

#### **Publications**

- **Wang, A.** Hanselman, C.L., Gounaris, C.L., "A Customized Branch-and-Bound Approach for Irregular Shape Nesting," Submitted.
- Shi, S., Wang, L., Wang, A., Huang, R., Ding, L., Su, R., Qi, W. and He, Z., 2016. Bioinspired Fabrication of Optical Fiber SPR Sensors for Immunoassays Using Polydopamine-accelerated Electroless Plating. *Journal of Materials Chemistry C*, 4(32), pp.7554-7562.

### **Presentations**

- **Wang, A.** Hanselman, C.L., Gounaris, C.L., "A Customized Branch-and-Bound Approach for Irregular Shape Nesting Problems," CAPD Annual Meeting, Mar. 14, 2017. Poster.
- **Wang, A.**, Gounaris, C.E., "Branch-Price-and-Cut for Distribution via Heterogeneous Fleets," Enterprise-Wide Optimization Meeting, Sept. 20, 2016. Poster.
- **Wang, A.**, Shi, S., Su, R., "The Bioinspired Fabrication, Modification and Application of Fiber-Optical SPR Sensors," Senior Thesis Presentation in Tianjin University, June 26, 2015.

# **Teaching Experience**

Teaching Assistant, Carnegie Mellon University

Jan. 2016 - present

- Optimization Modelling and Algorithms
- Chemical Process Systems Design
- Special Topics: Process Systems Engineering