

**THE UNIVERSITY OF BRITISH COLUMBIA**  
*Curriculum Vitae for Faculty Members*

Date: Aug 2021

Initials: JY

1. **SURNAME:** Yan **FIRST NAME:** Julia  
**MIDDLE NAME(S):** Yun Chien
2. **DEPARTMENT/SCHOOL:** Division of Operations and Logistics
3. **FACULTY:** Sauder School of Business
4. **PRESENT RANK:** Assistant Professor **SINCE:** July 2021

5. **POST-SECONDARY EDUCATION**

University or Institution	Degree	Subject Area	Dates
Massachusetts Institute of Technology	PhD	Operations Research	2015 – 2020
Princeton University	BA	Chemistry	2009 – 2013

**Special Professional Qualifications**

6. **EMPLOYMENT RECORD**

(a) *Prior to coming to UBC*

University, Company or Organization	Rank or Title	Dates
Lyft	Postdoctoral Research Fellow	2020 – 2021
Analytics Operations Engineering	Analyst	2013 – 2015

(b) *At UBC*

Rank or Title	Dates
Assistant Professor	2021 – present

(c) *Date of granting of tenure at U.B.C.:*

7. **LEAVES OF ABSENCE**

University, Company or Organization at which Leave was taken	Type of Leave	Dates

8. **TEACHING**(a) *Areas of special interest and accomplishments*

At MIT:

- 15.060 Data, Models, and Decisions
- 15.071 The Analytics Edge

(b) *Courses Taught at UBC*

Session	Course Number	Scheduled Hours	Class Size	Hours Taught			
				Lectures	Tutorials	Labs	Other
2021 W1	BABS 550 001	20	60	20			
2020 W1	BABS 550 002	20	60	20			
2020 W1	BABS 550 MM1	27.5	60	20	7.5		

(c) *Graduate Research Supervision*

Student Name	Program Type	Year		Supervisory Role (supervisor, co-supervisor, committee member)
		Start	Finish	

(d) *Graduate Program Supervision*

Student Name	Program Type	Year		Supervisory Role (supervisor, co-supervisor, committee member)
		Start	Finish	

(e) *Continuing Education Activities*(f) *Visiting Lecturer (indicate university/organization and dates)*(g) *Other*

## 9. SCHOLARLY AND PROFESSIONAL ACTIVITIES

### (a) *Areas of special interest and accomplishments*

Transportation, logistics, mixed-integer optimization

### (b) *Research or equivalent grants (indicate under COMP whether grants were obtained competitively (C) or non-competitively (NC))*

Granting Agency	Subject	COMP	\$ Per Year	Year	Principal Investigator	Co-Investigator(s)

### (c) *Research or equivalent contracts (indicate under COMP whether grants were obtained competitively (C) or non-competitively (NC)).*

Granting Agency	Subject	COMP	\$ Per Year	Year	Principal Investigator	Co-Investigator(s)

### (d) *Invited Presentations (Identify whether International/National/Local)*

- "From physical properties of transportation flows to demand estimation". École Polytechnique Fédérale de Lausanne, EIT Urban Mobility Seminar, November 2020.
- "From physical properties of transportation flows to demand estimation". The University of Massachusetts Amherst, Civil and Environmental Engineering, September 2019.
- "Fitting admixture graphs with mixed-integer quadratic optimization". Harvard Medical School, David Reich Lab, September 2019.

### (e) *Other Presentations*

- "The edge of optimization in large-scale vehicle routing for paratransit". INFORMS Annual Meeting, Virtual, October 2020.
- "Data-driven transit network design at scale". TRISTAN X, Hamilton Island, June 2020.
- "The edge of optimization in large-scale vehicle routing for paratransit". INFORMS Annual Meeting, Seattle, October 2019.
- "Data-driven transit network design at scale". INFORMS Annual Meeting, Phoenix, October 2018.
- "Joint frequency-setting and pricing optimization for multimodal transit networks at scale". INFORMS Annual Meeting, Houston, October 2017.
- "From physical properties of transportation flows to demand estimation". INFORMS Annual Meeting, Nashville, October 2017.

(f) *Other*

(g) *Conference Participation (Organizer, Keynote Speaker, etc.)*

**10. SERVICE TO THE UNIVERSITY**

(a) *Areas of special interest and accomplishments*

(b) *Memberships on committees, including offices held and dates*

(c) *Other service, including dates*

**11. SERVICE TO THE COMMUNITY**

(a) *Memberships on scholarly societies, including offices held and dates*

(b) *Memberships on other societies, including offices held and dates*

(c) *Memberships on scholarly committees, including offices held and dates*

(d) *Memberships on other committees, including offices held and dates*

(e) *Editorships (list journal and dates)*

(f) *Reviewer (journal, agency, etc. including dates)*

- Reviewer for Operations Research, Transportation Science, and Decision Sciences.

(g) *External examiner (indicate universities and dates)*

(h) *Consultant (indicate organization and dates)*

(i) *Other service to the community*

**12. AWARDS AND DISTINCTIONS**

(a) *Awards for Teaching (indicate name of award, awarding organizations, date)*

(b) *Awards for Scholarship (indicate name of award, awarding organizations, date)*

(c) *Awards for Service (indicate name of award, awarding organizations, date)*

(d) *Other Awards*

**13. OTHER RELEVANT INFORMATION (Maximum One Page)**

**THE UNIVERSITY OF BRITISH COLUMBIA**  
***Publications Record***

**SURNAME:** Yan

**FIRST NAME:** Julia

**Initials:** JY

**MIDDLE NAME(S):** Yun Chien

**Date:** Aug 2021

**1. REFEREED PUBLICATIONS**

(a) *Journals*

- C. Barnhart, D. Bertsimas, A. Delarue & **J. Yan**. "Course scheduling under sudden scarcity: Applications to pandemic planning", to appear in *Manufacturing & Service Operations Management*.
- D. Bertsimas, Y.S. Ng & **J. Yan**. "Data-driven transit network design at scale", to appear in *Operations Research*.
- **J. Yan**, N. Patterson & V. Narasimhan. "Fitting admixture graphs using mixed-integer quadratic optimization", *Bioinformatics* btaa988 (2020).
- D. Bertsimas, Y.S. Ng & **J. Yan**. "Joint frequency-setting and pricing optimization for multi-modal transit networks at scale", *Transportation Science* 54(3) (2020), 839-853.
- L. Berk, D. Bertsimas, A. Weinstein & **J. Yan**. "Prescriptive analytics for human resource planning in the professional services industry", *European Journal of Operational Research* 272(2) (2019), 636-641.
- D. Bertsimas & **J. Yan**. "From physical properties of transportation flows to demand estimation: An optimization approach", *Transportation Science* 52(4) (2018), 1002-1011.
- D. Hocker, **J. Yan** & H. Rabitz. "Optimal nonlinear coherent mode transitions in Bose-Einstein condensates utilizing spatiotemporal controls", *Physical Review A* 93(5) (2016), 053612.
- **J. Yan**, D. Hocker, R. Long, T.S. Ho & H. Rabitz. "Exploring the control landscape for nonlinear quantum dynamics", *Physical Review A* 89(6) (2014), 063408.

(b) *Conference Proceedings*

(c) *Other*

**2. NON-REFEREED PUBLICATIONS**

(a) *Journals*

(b) *Conference Proceedings*

(c) *Other*

3. **BOOKS**

(a) *Authored*

(b) *Edited*

(c) *Chapters*

4. **PATENTS**

5. **SPECIAL COPYRIGHTS**

6. **ARTISTIC WORKS, PERFORMANCES, DESIGNS**

7. **OTHER WORKS**

8. **WORK SUBMITTED** (including publisher and date of submission)

9. **WORK IN PROGRESS** (including degree of completion)

- S. Martin, S. Taylor & **J. Yan**. "Trading flexibility for adoption: Dynamic versus static walking in ridesharing", to be submitted.
- S. Martin & **J. Yan**. "Designing shared ride networks", working paper.