# Yuchong Pan

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 $\rm http://ypan.me$ 

RESEARCH INTERESTS Programming languages and theoretical computer science – especially gradual typing, type systems, compilers, algorithms, theory of computation, theory of complexity, graph theory and combinatorial optimization.

**EDUCATION** 

## University of British Columbia

B.S., Computer Science and Mathematics, Combined Honours, expected 2021

#### EMPLOYMENT

## Microsoft Corporation

Software Engineer Intern, 2020 Software Engineer Intern, 2019 Software Engineer Intern, 2018

## University of British Columbia

Undergraduate Academic Assistant, 2019–2020 Undergraduate Teaching Assistant, 2019 Student Assistant, 2019

Undergraduate Teaching Assistant, 2018

#### Jisuanke

Teaching Researcher, 2018–2019 Lecturer, 2018–2019

#### Sogou, Inc.

Software Engineer Intern, 2017

## InitialView

Software Engineer Intern, 2016–2017

## RESEARCH EXPERIENCE

#### University of British Columbia

Gradual typing of recursive types, 2018–present

o Advisor: Ronald Garcia

## TEACHING EXPERIENCE

# University of British Columbia

 $Teaching\ Assistant$ 

CPSC 421/501 Introduction to Theory of Computing (graduate), Fall 2019 CPSC 121 Models of Computation, Fall 2018

Academic Assistant

CPSC 411 Introduction to Compiler Construction, Fall 2019–Spring 2020

## Jisuanke

Lecturer

Competitive Programming, Level 6 Spring 2019 Competitive Programming, Level 5 Fall 2018 Competitive Programming, Level 3 Summer 2018

Teaching Researcher

Competitive Programming, Level 6 Spring 2019

## VOLUNTEER EXPERIENCE

#### Shaoxing No.1 High School

Summer Coach (Competitive Programming), 2016 Student Lecturer (Competitive Programming), 2013–2015

# Talks and Presentations

- Unsplittable Flow Problem on Paths and Trees: Closing the LP Relaxation Integrality Gap (with Adam Jozefiak). UBC CPSC 531F survey. University of British Columbia. Vancouver, BC. 2019. [Slides] [Report]
- Introduction to Communication Complexity. Quantum Club seminar. University of California, Santa Barbara. Santa Barbara, CA. 2019.
- Gradual Typing for Octave Language (with Ada Li, Kathy Wang, and Paul Wang).
  UBC CPSC 311 project. University of British Columbia. Vancouver, BC. 2018.
  [Report]

## Honors and Awards

- Faculty of Science International Student Scholarship (CAD \$5,000), University of British Columbia, 2019.
- Dean of Science Scholarship (CAD \$350), University of British Columbia, 2019.
- Trek Excellence Scholarship (CAD \$4,000), University of British Columbia, 2019.
- Stanley M Grant Scholarship in Mathematics (CAD \$1,500), University of British Columbia, 2019.
- o Programming Language Implementation Summer School Fellowship (€400), 2019.
- o Science Scholar / Dean's Honour List, University of British Columbia, 2019.
- Faculty of Science International Student Scholarship (CAD \$10,000), University of British Columbia, 2018.
- o Dean of Science Scholarship (CAD \$425), University of British Columbia, 2018.
- o Trek Excellence Scholarship (CAD \$4,000), University of British Columbia, 2018.
- o Marie Kendall Memorial Scholarship in Science (CAD \$925), University of British Columbia, 2018.
- $\circ\,$  Joel Harold Marcoe Memorial Scholarship (CAD \$150), University of British Columbia, 2018
- o Science Scholar / Dean's Honour List, University of British Columbia, 2018.
- Outstanding International Student Award (CAD \$6,000), University of British Columbia, 2017.
- Silver Medal, China Team Selection Completition for International Olympiad in Informatics, China Computer Federation, 2015.
- Bronze Medal, Asia Pacific Informatics Olympiad, China Computer Federation, 2015.
- First Prize, National Olympiad in Informatics in Provinces (Advanced Division), China Computer Federation, 2014.
- $\circ$  First Prize, National Olympiad in Informatics in Provinces (Advanced Division), China Computer Federation, 2013.

## Selected Coursework

- Probability (graduate)
- Stochastic Processes (graduate)
- Submodular Optimization (graduate)
- $\circ$  Combinatorial Optimization (graduate)
- Tools for Modern Algorithm Analysis (graduate)

- Introduction to Theory of Computing (graduate)
- o Real Variables
- Introduction to Software Engineering
- o Definition of Programming Languages
- $\circ$  Introduction to Compiler Construction
- o Intermediate Algorithm Design and Analysis
- Computer Hardware and Operating Systems

ACADEMIC

 $\circ\,$  Second Programming Language Implementation Summer School. Bertinoro, Italy.

Training 2019.

RELEVANT SKILLS Languages: English, Mandarin

Programming: LATEX, Racket, Standard ML, JavaScript, C/C++, Java, C#, Python,

Ruby, MATLAB, Go, MySQL

Last Updated January 13, 2020