CHUNYUN MA

A human behavioural researcher with a passion for teaching data science and a knack for unpacking complex topics to a diverse audience. I excel at finding patterns in seemingly chaotic behavioural data and communicating the stories of those patterns to both non-technical and academic audiences.



2021

♣ SELECTED TEACHING EXPERIENCE

Experiment design and statistics

Carleton University

Ottawa. ON

- · Designed and delivered a series of online lectures on data science and statistics using R for graduate students with diverse backgrounds including psychology, computer science, and cognitive science
- Published detailed lecture notes as a book companion⁷ under the Creative Commons License
- · Won a university-wide teaching excellence award on nominations by the

Experiment design and statistics 2020

Carleton University

Ottawa. ON

· Designed and delivered a series of lectures on data science and statistics using R for graduate students with diverse backgrounds including psychology, computer science, and cognitive science

Mixed linear modelling with R 2019

Children's Hospital of Esternal Ontario (CHEO)

Ottawa. ON

· Presented a workshop to a group of biomedical statisticians

Applied statistics with R 2018

Carleton University

Ottawa. ON

· Designed and delivered a series of five workshops for faculty members and graduate students

Advanced statistics 2017

2012

Carleton University

Ottawa, ON

- · Conducted weekly tutorials, and provided one-on-one coaching session to graduate students
- · Won Teaching Assistant Award in 2014 on nominations from students and instructors

Cognitive psychology 2016

Carleton University

Ottawa. ON

· Designed and delivered lecture series on topics related to for undergraduate students

View this CV online with links at chunvunma.me/about-me/

CONTACT

mcypsy@gmail.com

y chun_yun

github.com/chunyunma

6 chunyunma.me

in linkedin.com/in/chunyun-

LANGUAGE SKILLS

R		
AWK		
Python		
С		

Made with the R package datadrivencv

The source code is available on github.com/chunyunma/resume.

Last updated on 2021-09-15.



SELECTED PROFESSIONAL EXPERIENCE

current 2021

Research and Experimentation Officer

Financial Consumer Agency of Canada

Ottawa, ON

- · Lead statistical analyses and reporting on the COVID Financial Wellbeing survey
- · Contribute to designing an agency-wide research and data sharing platform

2020 2019

Research Psychologist

National Research Council Canada

Ottawa. ON

- · Led an analysis on building evacuation safety in Canada, and published the results in a peer-reviewed journal
- · Engage stakeholders for a client project on training firefighters using virtual reality
- · Develop and conduct experimental studies on Human Behaviour in Evacuation

2019 2019

Behavioural Data Scientist

Macadamian

• Gatineau. OC

- · Developed statistical models of health care data for clients
- · Evaluate the usability of new and legacy client products
- · Present findings and recommendations to clients

2019 2018

Postdoctoral Fellow

Carleton University

Ottawa, ON

- · Conduct applied cognitive research in general aviation, driving, and maritime navigation
- · Led multiple analyses on pilots' cognitive health using R, and coauthored two conference proceedings on evaluating cognitive health of general aviation pilots using a real-life sized simulator
- · Coached research partners on data analyses and visualizations using R



■ SELECTED COMMUNICATION EXPERIENCE

2021

Where drills differ from evacuations: A case study on Canadian **buildings**

♀ Safety Science

· Authored with Kinateder, M., Gwynne, S., Amos, M., & Bénichou, N.

2019

The NASA MATB-II Predicts Prospective Memory Performance During **Complex Simulated Flight**

- International Symposium on Aviation International Symposium on Aviation Psychology
- · Authored with Benthem, K. V., Shanahan, C., Fraser, A., & Herdman, C. M.

Augmented Reality for Littoral Navigation

- $oldsymbol{Q}$ A technical report prepared for the Advanced Cognitive Engineering lab, Carleton University
- · Authored with Benthem, K. V.

Team Displays Work, Particularly With Communication Breakdown:
Performance And Situation Awareness In A Simulated Forest Fire

Boston, MA

- 56th Annual Human Factors and Ergonomics Society Conference
- · Authored with Parush, A.

EDUCATION

Ph.D.

2017

Carleton University

🕈 Ottawa, ON

• In my dissertation, I examined discrepancy between findings obtained using general linear model and mixed linear model, and drew conclusions about boundary conditions under which MLM is more suitable than GLM to use for data analysis.

2011 | 2009

2012

M.A.

Carleton University

Ottawa, ON

• In my thesis, I studied how to safely integrate modern technology to high-risk environments where human communication and teamwork is critical, such as operating rooms, command and control centres for wild fire fighting.

2009 | 2005 B.Sc.

Zhejiang University

• Hangzhou, China

• Thesis: Four factors underlying perceived validity of answers on question-and-answer sites