# Yizhen (Eejain) Huang

#### POST-DOCTORAL RESEARCHER IN EDUCATIONAL PSYCHOLOGY

Educational Research in the Educational Sciences, Universität Potsdam, Karl-Liebknecht-Str. 24/25, 14476 Potsdam, Germany

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# **Current Research Interests**

- VR-based teacher training and research
- · Teachers' professional vision and eye movements

## Scientific Career

**Research Associate** Kiel University, Germany

DEPARTMENT OF RESEARCH ON TEACHING AND TEACHER EDUCATION

· Lead Professor: Prof. Dr. Thilo Kleickmann

Research Associate University of Potsdam, Germany

EDUCATIONAL RESEARCH IN EDUCATIONAL SCIENCES, DEPARTMENT OF EDUCATION

Lead Professor: Prof. Dr. Dirk Richter

## Education

University of Michigan, Ann Arbor, Ph.D. in Psychology

United States

2019-Present

2018-Present

COMBINED PROGRAM IN EDUCATION AND PSYCHOLOGY 2013-2018

• Graduate Date: August 17, 2018

· Dissertation Title: "Learning from Teacher's Eye Movement: Expertise, Subject Matter and Video Modeling"

• Doctoral Committee: Kevin F. Miller (chair), Kai S. Cortina, Richard D. Gonzalez, Priti R. Shah

University of Michigan, Ann Arbor, M.S. in Psychology

United States

COMBINED PROGRAM IN EDUCATION AND PSYCHOLOGY 2016-2017

**B.S. in Psychology** Beijing Normal University, China

SCHOOL OF PSYCHOLOGY 2009-2013

# **Research Projects**

#### **Virtual Reality in Teacher Education**

EDUCATIONAL RESEARCH IN THE EDUCATIONAL SCIENCES, UNIVERSITY OF POTSDAM

Internal Funding

· Co-Principal Investigator. Co-PIs: Dirk Richter, Thilo Kleickmann, Eric Richter

#### **Understand Teacher's Professional Development Choices in Brandenburg**

EDUCATIONAL RESEARCH IN THE EDUCATIONAL SCIENCES, UNIVERSITY OF POTSDAM

Internal Funding

· Co-Principal Investigator. Co-PIs: Eric Richter, Dirk Richter

## Look through You: How First-person Perspective Video Promotes Perceptual Problem Solving?

RACKHAM GRADUATE SCHOOL, UNIVERSITY OF MICHIGAN

• Rackham Graduate Student Research Grant (\$3,000)

• Principal Investigator. Co-PIs: Kevin F. Miller, Kai S. Cortina

## Effects of Modeling that Convey Moral Standards on Delay of Gratification among **Chinese and US Preschoolers**

THE INTERNATIONAL INSTITUTE, UNIVERSITY OF MICHIGAN

International Institute Individual Fellowships (\$5,000)

• Principal Investigator. Co-PIs: Kevin F. Miller, Kai S. Cortina

Potsdam, Germany

2019-Present

Potsdam, Germany

2018-2019

Ann Arbor, United States

2017-2018

Ann Arbor, United States

2016

SCHOOL OF EDUCATION, UNIVERSITY OF MICHIGAN

- Professor & Mrs. Cho-Yee To Fund (\$4,000)
- Principal Investigator. Co-PIs: Kevin F. Miller, Kai S. Cortina

# Awards and Other Fundings.

#### **AERA SIG-IT Best Paper Award (\$350)**

Virtual

2014

AMERICAN EDUCATIONAL RESEARCH ASSOCIATION (AERA) INSTRUCTIONAL TECHNOLOGY SPECIAL INTEREST GROUP (SIG-IT)

2021

· Selected as the best research paper submitted to SIG-IT and accepted for presentation at the AERA 2021 Conference.

## Study Innovation Prize 3rd Place (€100)

Potsdam, Germany

FACULTY OF HUMAN SCIENCES, UNIVERSITY OF POTSDAM

2020

· Selected as the top three innovative teaching projects that promote good practice in E-Learning.

#### Potsdam Travel Grant (€1,480)

Potsdam, Germany

2010

POTSDAM GRADUATE SCHOOL, UNIVERSITY OF POTSDAM

• Support presentations in scientific events.

# Rackham Conference Travel Grant (\$800)

Ann Arbor, United States

RACKHAM GRADUATE SCHOOL, UNIVERSITY OF MICHIGAN

2011

• Support graduate students in good academic standings for academic conferences.

# **Publications**.

#### REFEREED JOURNAL ARTICLES

- **Huang, Y.**, Richter, E., Kleickmann, T., Wiepke, A., & Richter, D. (2021). Classroom complexity affects student teachers' behavior in a VR classroom. *Computers & Education*, 163, 104100. https://doi.org/10.1016/j.compedu.2020.104100
- **Huang, Y.**, Miller, K. F., Cortina, K. S., & Richter, D. (2021). Teachers' professional vision in action: Comparing expert and novice teacher's real-life eye movements in the classroom. *Zeitschrift Für Pädagogische Psychologie*, 1–18. https://doi.org/10.1024/1010-0652/a000313
- Richter, E., Marx, A., **Huang, Y.**, & Richter, D. (2020). Zeiten zum beruflichen Lernen: Eine empirische Untersuchung zum Zeitpunkt und der Dauer von Fortbildungsangeboten für Lehrkräfte [Time for professional learning: an empirical study about timing and duration of teacher training]. Zeitschrift für Erziehungswissenschaft, 23(1), 145–173. https://doi.org/10.1007/s11618-019-00924-x

#### **BOOK CHAPTERS AND REPORTS**

Cortina, K. S., Miller, K. F., Hua, S., Peist, E., **Huang, Y.**, & Wei, Y. (2013). Behavioral regulation of preschoolers in China and the US: the role of attention. In N. McElvany & H. G. Holtappels (Eds.), *Empirische Bildungsforschung: Theorien, Methoden, Befunde und Perspektiven [Empirical educational research: theories, methods, findings, and perspectives] (pp. 125–133). Waxmann Verlag. https://books.google.com?id=rUAdAAAAQBAJ* 

#### OTHER PUBLICATIONS

- **Huang, Y.** (2018). Learning from teacher's eye movement: Expertise, subject matter and video modeling [Doctoral dissertation, University of Michigan]. https://doi.org/2027.42/145853
- **Huang, Y.** (2017). A discussion on data visualization in 21st century education. Blog of Center for Academic Innovation at University of Michigan. https://ai.umich.edu/blog/a-discussion-on-data-visualization-in-21st
- **Huang, Y.**, Foley, K., & Jankovic, F. (2017). A picture is worth a thousand words: Understanding learners through visualization. Blog of Center for Academic Innovation at University of Michigan. https://ai.umich.edu/blog/a-picture-is-worth-a-thousand-words-understanding-learners-through-visualization/

#### SUBMITTED MANUSCRIPTS

**Huang, Y.**, Richter, E., Kleickmann, T., & Richter, D. (2021). Class size affects preservice teachers' physiological and psychological stress reactions: An experiment in a virtual reality classroom [Submitted for publication].

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- **Huang, Y.**, Lazarides, R., & Richter, D. (2021). *Teachers' adaptations to COVID-19: Perceived preparedness for distance education, frequency of teacher–student contact, and resources in ICT [Under review]*.
- **Huang, Y.**, Richter, E., Kleickmann, T., & Richter, D. (2021). Virtual reality in teacher education from 2010 to 2020: A review of program implementation, intended outcomes, and effectiveness measures [Accepted for publication].

# **Presentations**

## REFEREED CONFERENCE PRESENTATIONS

- **Huang, Y.**, Richter, E., Kleickmann, T., Wiepke, A., & Richter, D. (2021, April). *Classroom complexity affects student teachers' behavior in a VR classroom* [Paper presentation]. American Educational Research Association (AERA) 2021 Annual Meeting, Virtual.
- Huang, Y., Richter, E., & Richter, D. (2020, April). Presence and efficacy: Training preservice teachers' classroom management skills in virtual reality [Paper presentation]. American Educational Research Association (AERA) 2020 Annual Meeting, San Francisco, CA, United States (Conference Canceled). http://tinyurl.com/vqq6flp
- **Huang, Y.**, Miller, K. F., Cortina, K. S., & Richter, D. (2019, February). *Learning from teacher's eyes: Expertise and eye movements* [Paper presentation]. Gesellschaft für Empirische Bildungsforschung [Society for Empirical Educational Research] (GEBF) 2019 Annual Meeting, Köln, NW, Germany.
- Richter, D., Wiepke, A., Richter, E., **Huang, Y.**, & Zender, R. (2019, February). *Nutzung von Virtual Reality-Technologie zur Erfassung von Klassenführungskompetenzen in der Lehrerausbildung [Using virtual reality technology to assess classroom management skills in teacher education]* [Paper presentation]. Gesellschaft für Empirische Bildungsforschung [Society for Empirical Educational Research] (GEBF) 2019 Annual Meeting, Köln, NW, Germany.
- Richter, E., Marx, A., **Huang, Y.**, & Richter, D. (2019, February). *Zeiten zum Lernen: Eine empirische Analyse zum Zeit- punkt und der Dauer von Fortbildungsveranstaltungen für Lehrkräfte [Times to learn: An empirical analysis of the timing and duration of professional development events for teachers]* [Paper presentation]. Gesellschaft
  für Empirische Bildungsforschung [Society for Empirical Educational Research] (GEBF) 2019 Annual Meeting, Köln, NW, Germany.
- Park, I., **Huang, Y.**, & Sun, X. (2018, April). Effects of first impressions and instructional quality on student engagement: A continuous evaluation [Symposium]. American Educational Research Association (AERA) 2018 Annual Meeting, New York, NY, United States.
- **Huang, Y.**, Miller, K. F., Cortina, K. S., & Su, L. (2017, April). *Effects of modeling on delay of gratification among Chinese preschoolers: Testing a new method for assessing self-control* [Poster presentation]. Society for Research in Child Development (SRCD) 2017 Biennial Meeting, Austin, TX, United States.
- **Huang, Y.**, Su, L., & Miller, K. F. (2015, March). *Looking through you: First-person perspective video affects Chinese preschoolers' sex-typed toy choices* [Poster presentation]. Society for Research in Child Development (SRCD) 2015 Biennial Meeting, Philadelphia, PA, United States.
- Wang, Z., & **Huang, Y.** (2013, April). Attention, self-regulation, and looking at distractions in preschool Chinese children [Poster presentation]. Society for Research in Child Development (SRCD) 2013 Biennial Meeting, Seattle, WA, United States.

#### INVITED TALKS

- **Huang, Y.** (2018, October). Learning from teacher's eye movement: Expertise, subject matter and video modeling [Talk]. Department of Education Colloquium Series, University of Potsdam, Potsdam, Germany.
- **Huang, Y.** (2017, March). Effects of modeling on delay of gratification among Chinese preschoolers: Testing a new method for assessing self-control [Talk]. Combined Program in Education and Psychology Colloquium Series, University of Michigan, Ann Arbor, MI, United States.
- **Huang, Y.** (2015, October). Looking through you: First-person perspective video affects Chinese preschoolers' sextyped toy choices [Talk]. Combined Program in Education and Psychology Colloquium Series, University of Michigan, Ann Arbor, MI, United States.

# **Teaching Experience**

Education on the Horizon: Teaching and Learning with Technology

University of Potsdam

[Undergraduate seminar] Instructor

2019–Present

**Enhance Teaching and Learning through the Perspective of Cognitive Psychology** 

University of Potsdam 2018–Present

[Undergraduate seminar] Instructor

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**Understand Schooling through the Lens of Cross-cultural Comparisons** 

University of Potsdam 2018–Present

[Undergraduate seminar] Instructor

University of Michigan

Educational Psychology and Human Development
[Undergraduate Seminar] Graduate Student Instructor

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Research Methods in Educational and Cross-cultural Contexts

University of Michigan

[UNDERGRADUATE SEMINAR] GRADUATE STUDENT INSTRUCTOR

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**Introduction to Psychology** 

University of Michigan

[Undergraduate seminar] Graduate Student Instructor

2014–2017

**Psychology Subject** 

Gucheng High School, Beijing, China

HIGH SCHOOL TEACHER

2012

# Working Experience \_\_\_\_\_

#### **Data Visualization Specialist**

Ann Arbor, United States

DIGITAL EDUCATION & INNOVATION LAB, THE OFFICE OF ACADEMIC INNOVATION, UNIVERSITY OF MICHIGAN

2016-2017

• Responsible for managing, mining, analyzing and visualizing big data set for the Massive Open Online Courses provided by University of Michigan.

Program Leader Ann Arbor, United States

GLOBAL COURSE CONNECTION IN CHINA, CENTER FOR GLOBAL AND INTERCULTURAL STUDY, UNIVERSITY OF MICHIGAN

2013-2017

 Responsible for leading international comparison studies both in US and China, as well as facilitating the cultural and academic exchange between American and Chinese college students.

 Graphic Designer
 Virtual

 FREELANCE
 2011-Present

Graphic designer specialized in scientific illustration and data visualization

# **Professional Service**

**AD-HOC PEER REVIEW** 

- Computers & Education (2021–Present)
- European Journal of Teacher Education (2021–Present)

# Institutional Service\_

Admissions Committee University of Michigan

COMBINED PROGRAM IN EDUCATION AND PSYCHOLOGY 2017–2018

**Colloquium Planning Committee**University of Michigan

COMBINED PROGRAM IN EDUCATION AND PSYCHOLOGY 2016–2017

Communications Committee University of Michigan

COMBINED PROGRAM IN EDUCATION AND PSYCHOLOGY 201

Executive Committee Cohort Representative

University of Michigan

COMBINED PROGRAM IN EDUCATION AND PSYCHOLOGY 2013

Graduate Student Mentor

University of Michigan

# **Current Memberships**

THE MICHIGAN ASSOCIATION OF PSYCHOLOGY SCHOLARS

· Society for Research in Child Development

2013

- American Educational Research Association: Division C (Learning and Instruction), SIG 119 (Technology, Instruction, Cognition, and Learning), SIG 052 (Instructional Technology)
- American Psychological Association: Division 7 (Developmental Psychology), Division 15 (Educational Psychology)

# Skills\_

**Data Science** R, SPSS, Tableau, Python

**Reproducible Report** Markdown, org-babel, LaTeX, Pandoc

**Programming Languages** C/C++/C#

**Apparatus** SMI Mobile Eye-tracking system, Tobii Eye-tracking system, Pupil Labs Eye-tracking system, HTC VIVE

**Quantitative Methods**Hierarchical Linear Modeling, Structural Equation Modeling, Survey Design,

Unsupervised/Supervised Machine Learning

**Languages** English, Mandarin

## References\_\_\_\_\_

Prof. Dr. Kevin F. Miller

kevinmil@umich.edu; 734-615-1800

PROFESSOR OF PSYCHOLOGY AND EDUCATION, UNIVERSITY OF MICHIGAN

Prof. Dr. Kai S. Cortina

schnabel@umich.edu; 734-615-3809

PROFESSOR OF PSYCHOLOGY, UNIVERSITY OF MICHIGAN

Prof. Dr. Dirk Richter

dirk.richter@uni-potsdam.de; 0331-977-2133

Professur für Erziehungswissenschaftliche Bildungsforschung [Professorship of Educational Research in the Educational Sciences], University of Potsdam

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