

## Zhehao Huang

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### **EDUCATION:**

*State University of New York, College of Optometry, New York, NY, USA*

**PhD Candidate**, Vision Science, Expected Graduation: 2021

Current GPA: 4.0

*Peking University, Department of Psychology (Now School of Psychological and Cognitive Science), Beijing, China*

**Bachelor of Science**, Psychology, July 2015

GPA: 3.52

### **RESEARCH:**

**State University of New York, Graduate Center for Vision Research,**

New York, NY, Aug 2015-present, Graduate Assistant

Laboratory of Dr. Qasim Zaidi

I am interested in human color perception and how our brain decodes light signals into color perception. Specifically, I have been studying how human perceive and estimate color under sophisticated illuminant conditions. My first project is about sequential effect in color perception, introducing successive illuminant changes to examine positive or negative sequential effect in color matching. We altered different stimuli sequence to see if observers' current responses would be effected by previous trials, but could not find a systematic result.

Later on, I was working on a image processing model based on various neurons in visual cortex. Currently I'm currently working on a behavior and neural model of illuminant and color estimation in complex color scenes. We have compared multiple physical characteristics of transmitting layers which could provide cues for transparency separation, and designed a series of stimuli with stereotypical geometrical and color features. We used these stimuli on multiple psychophysics and brain imaging experiments, trying to build up a behavior and neural model of the quantitative estimate of the influence of different factors on perceived transparency.

**Peking University, Department of Psychology, Beijing, China, Jan 2012-  
June 2015**

Laboratory of Dr. Fang Fang

I started my first research project in Dr. Fang's lab after a year of studying and training. We discovered a chromatic induction elicited by a two-color grating pattern and examined it in multiple experiments. I conducted one of the experiments, using high frequency flickering stimuli to induce observers. The observers showed the perception color shifts without being aware of the patterned backgrounds. The result, along with other experiments in the project, suggested that chromatic induction occurs at an early stage in human vision processing.

### **MEETINGS:**

Huang, Z. & Zaidi, Q. (2015, May). *Sequential attraction in color perception*. Poster session presented at Vision Science Society Annual Meeting, St. Pete Beach, FL

Huang, Z. & Zaidi, Q. (2019, May). *Color transparency from motions of backgrounds and overlays*. Talk session presented at Computational and Mathematical Models in Vision (MODVIS), St. Pete Beach, FL

Huang, Z. & Zaidi, Q. (2019, May). *Motion generated scission of surface color from transparent layer*. Poster session presented at Vision Science Society Annual Meeting, St. Pete Beach, FL

### **PUBLICATIONS:**

Zhang, Y., Huang, Z., Sun, Y., Fang, F. (2020). *Chromatic induction occurs in the early cortical stages of visual processing*. Manuscript submitted for publication.

Huang, Z., & Zaidi, Q. (2021). *Lack of Serial Dependence in Dynamic Object Color Estimation*. Manuscript submitted for publication.

Huang, Z., & Zaidi, Q. (2021). Spatial Induction in Color Scission. *I-Perception.*, 12(2), <https://doi.org/10.1177/20416695211000364>

Huang, Z., & Zaidi, Q. (2021). *Perceptual scale for transparency*. Manuscript in preparation.

### **PROFESSIONAL EXPERIENCE:**

**Teaching Assistant**, *State University of New York, College of Optometry, 2015-2018*

- Assistant for Visual Function –Sensory Motor II Lab, supervised by Dr. Kenneth Ciuffreda

**Teaching Assistant**, *State University of New York, College of Optometry, 2018-2019*

- Assistant for Visual Function –Sensory Motor II Lab, supervised by Dr. Kevin Willeford

**SKILLS:** Matlab, SPSS

### **HONORS AND AWARDS:**

**Well-rounded student**, Peking University, Department of Psychology, 2012

**Undergraduate student exchange scholarship**, China Scholarship Council, 2013

### **LEADERSHIP and COMMUNICATION EXPERIENCE :**

**Vice President**, *Original Fire Animation and Comic Association, Peking University, 2012-2013*

- Top ten student organization, 2013