Song Qi

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EDUCATION

8/2016–7/2019 **PhD Candidate**: **California Institute of Technology** (Caltech), USA
Investigating fear and anxiety in ecologically valid contexts with fMRI and computational models.
Supervisors: Dean Mobbs, John O'Doherty and Ralph Adolphs

6/2014–8/2016 **PhD Student**: **Columbia University in the City of New York**, USA
How Social factors influence human decision making under threat
Supervisors: Dean Mobbs and James Curley

8/2010–6/2014 **BSc Electronic Information & Biomedical Engineering** (Hons): **UESTC**, China
Ying Cai Experimental School (School of Honor, Top 5% undergrads)
Supervisors: Keith M. Kendrick and Benjamin Becker

PUBLICATIONS

Qi S., Hassabis, D., Sun J., Guo,F., Daw N., Mobbs,D. (2018). How cognitive and reactive fear circuits optimize escape decisions in humans, *Proceedings of the National Academy of Sciences* 115 (12), 3186-3191

Qi S.*, Footer O.*, Camerer, C.F. and Mobbs,D. (2018). A collaborator's reputation can bias decisions and anxiety under uncertainty, *Journal of Neuroscience* 38 (9), 2262-2269

Qi S.*, Hu J.*, Becker B.*, Luo L., Gao S., Gong Q., Hurlemann R. and Kendrick K.M. (2015). Oxytocin selectively facilitates learning with social feedback and increases activity and functional connectivity in emotional memory and reward processing regions, *Human Brain Mapping* 36(6), 2132-2146

Qi, S*., Fung, B. J.*, Hassabis, D., Daw, N., & Mobbs, D. (2019). Slow escape decisions are swayed by trait anxiety. *Nature human behaviour*, 1.

Yao, S., **Qi, S.,** Kendrick, K. M., & Mobbs, D. (2018). Attentional set to safety recruits the ventral medial prefrontal cortex. *Scientific reports*, *8*(1), 15395.

ACADEMIC WORK EXPERIENCE

9/2014–present Research Assistant: Mobbs Lab for Social, Affective and Ecological Neuroscience, Caltech, USA
Fear and decision making under threat, with **fMRI** techniques and **computational modelling**
Supervisors: Dean Mobbs, in collaboration with John O'doherty and Ralph Adolphs

3/2012–6/2014 Research Assistant: Social Cognition and Affective Neuroscience Group, UESTC, China
Oxytocin's selective facilitation of socially reinforced learning
Supervisors: Keith M. Kendrick, Benjamin Becker and Jiehui Hu

6/2013–7/2013 Visiting Research Assistant, Neuromodulation of Emotion Group, Universität Bonn, Germany
Experimental TMS therapy for **depression** patients
Supervisor: Rene Hurlemann

7/2013–10/2013 Visiting Research Assistant, Immunotrafficking lab, University of Manitoba, Canada
Collective Electrotaxis of Epithelial Cell
Supervisor: Francis Lin

ACADEMIC AWARDS AND HONOURS

8/12/2016 **Davidson's Fellowship & Lipper Fellowship**
California Institute of Technology

9/2014 **Dean's Fellowship**
Columbia University in the City of New York

8/3/2013 **Honorable Mention**
The 2013 ICM (Interdisciplinary Contest of Modelling)

CONFERENCE PRESENTATIONS (SELECTION)

Talks:

Qi,S. (2019) "Spatial margin of safety decisions in the face of volatile attack distances". T&C Chen Social and Decision Neuroscience Symposium, Caltech, Pasadena,USA

Qi S., Hassabis, D., Sun J., Guo,F., Daw N., Mobbs,D. (2018) "Cognitive/reactive fear circuits and decision under threat". @Society for Affective Science, 5th Annual Conference, Los Angeles, USA

Qi S., Hassabis, D., Sun J., Guo,F., Daw N., Mobbs,D. (2017) "How Cognitive and reactive fear circuits optimize escape decisions in humans".
@Social & Affective Neuroscience Society, 10th Annual Meeting, Los Angeles, USA

Posters:

Qi,S., Cross, L., Fung,B., O'Doherty,J., Mobbs,D. (2019) "Spatial margin of safety decisions in the face of volatile attack distances". Social & Affective Neuroscience Society, 12th Annual Conference, Miami, USA

Qi S., Hassabis, D., Sun J., Guo,F., Daw N., Mobbs,D. (2018) "How Cognitive and reactive fear circuits optimize escape decisions in humans". Society for Affective Science, 5th Annual Conference, Los Angeles, USA

Qi S.*, Footer O.*, Camerer, C.F. and Mobbs,D. (2016). "A collaborator's reputation can bias decisions and anxiety under uncertainty". Social & Affective Neuroscience Society, 9th Annual Meeting, New York

Qi S.*, Hu J.*, Luo L., Gao S., Becker B., Gong Q., Hurlemann R., Kendrick K.M. (2013) Oxycontin facilitates learning with social feedback and activity in emotion and reward regions. 2013 Annual Conference of Society for Social Neuroscience, Guangzhou, China

SKILLS

Techniques	**fMRI** (with SPM and FSL analytical tool box), **Multi-voxel pattern analysis** (with PyMVPA) **Computational modelling** and machine learning (e.g. SVMs)
Programming	Experienced with **MATLAB**, **Python** and **R**. Working knowledge for C++ and JAVA.
Languages	Chinese (native), English (fluent), Japanese (fair)
Tools	SPSS, Psychtoolbox, Cogent, Adobe Illustrator, Adobe Photoshop, Inkscape, LaTeX.

TEACHING & SUPERVISION

9/2014-9/2016	Introduction to Psychology (Teaching assistant with guest lectures)
	With Patricia Lindemann, Columbia University in the City of New York
3/2018–Present	Principles of Cognitive Neuroscience (Teaching assistant)
	With Dean Mobbs, Caltech