

Narjes Al-Zahli

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EDUCATION

Columbia University

Bachelor of Arts, Degree in Computer Science and Psychology

May 2023

- **Cognitive Science:** Research Methods | Cognitive Neuroscience | Consciousness Science | Evolution of Intelligence & Consciousness | Evolutionary Psychology | Brain & Language | Drugs & Behavior
- **Computer Science:** Artificial Intelligence | Computer Vision | Natural Language Processing | Machine Learning | Computational Robotics | Databases | Data Structures | Linear Algebra | Multi-Variable Calculus
- **Activities:** NeuroTechX, International Honor Society in Psychology | Women in Science | Effective Altruism Fellowship | Artificial Intelligence Safety Group | Rewriting The Code

EXPERIENCE

Lab Manager & Research Assistant | *Aly & DPML Labs, Columbia*

Oct 2023 – Present

- Administration: Oversee two labs, managing IRB protocols, subject recruitment and website maintenance.
- Research: Conduct research on Changes in Event Timescales using naturalistic stimuli (movies) and Event Segmentation analysis based on Hidden Markov Models.

Hands-On Research in Paris Brain Institute | *Columbia Global Center*

May 2023 – June 2023

- Lab Rotations: Rotated through leading labs at Paris Brain Institute (PICNIC, DreamTeam, FrontLab, ARAMIS), delving into cutting-edge consciousness research with Prof. Alfredo Spagna.
- Scientific Discussion: Connected with leading scientists like Lionel Naccache and Bassem Hassan, engaging in immersive discussion to deepen understanding of brain research and consciousness studies.
- Brain Measurement: Gained knowledge and practical skills in diverse brain measuring techniques (e.g., MRI, EEG, TMS) through comprehensive learning and hands-on experience at the labs.

Global Behavioral Science Program (GLOBES) | *University of Cambridge*

Jun 2022 – Sept 2022

- Research Design: Designed novel experiment to study positive deviance in 36 countries.
- Data Analysis: Utilized various statistical methods (e.g. chi-square, ANOVA, multinomial logistic regression, Bayesian Model Averaging), to process and analyze vast, international data set.
- Collaboration: Collaborated with international team to dissect literature and refine research direction.
- Publication: Authored two papers on positive deviance and cognitive biases, successfully published in Scientific Reports with Nature, and Behavioral and Brain Sciences Journal with Cambridge Press.

Research Assistant | *Davachi Lab, Columbia*

May 2022 – Nov 2022

- Literature Review: Delved into extensive research on unconscious memory relearning.
- Experimental Design: Refined experimental protocol on the updating of implicitly-formed memories.
- Subject Recruitment & Eye-Tracking: Recruited human subjects and ran experiments using computer-vision and eye-tracking algorithms to gather and analyze data.

Teaching Assistant | *Columbia University*

Jan 2021 – May 2023

- Computer Science Department | Discrete Mathematics | Prof. Ansaif Salleb-Aouissi
 - Developed coursework and guided students with problems on proofs, sets, graph theory and more.
- Psychology Department | Evolutionary Psychology | Prof. Lawrence Ian Reed

- Explored the Theory of Evolution to help students answer deep questions about the human mind.
- Physics Department | Physics for Poets | Prof. Szabolcs Marka
 - Created courseworks to introduce modern physics concepts, from quantum mechanics to cosmology.

Scientific Review Editor | *Grey Matters Neuroscience Journal*

Jan 2022 – Sept 2022

- Scientific Edition: Verified scientific integrity and validity of articles submitted to journal.
- Collaborative Publishing: Co-authored article on Integrated Information Theory of Consciousness.

International Scholar | *Takatuf Scholars Program*

August 2016 – Present

- Professional Training: Joined Takatuf, a competitive program that prepares Oman's most talented youth for personal and professional success, through career and research training.
- Distinction: Selected as 1 of 2 students nationally to receive a full scholarship covering boarding school and college, recognizing academic and leadership potential.
- Innovative Enterprise: Built retail website to empower economic independence of women in my town.

SKILLS

Programming Languages: Java | Python | C/C++ | R | JavaScript | MATLAB | PostgreSQL | Assembly

Machine Learning:

- Software: PyTorch, Keras, TensorFlow
- Computer Vision: Image Segmentation, Optical Flow, Convolutional Neural Networks
- Natural Language Processing: Dependency Parsing, Transformers
- Computational Robotics: PyBullet, Path Planning, Imitation Learning

Other: Databases | GitHub | Linux Environment | Google Cloud | EEG, fMRI, MEG Software | Web & App Development

Languages: Standard and Colloquial Arabic (native) | English (fluent)

PUBLICATIONS

- Ruggeri, K., Ashcroft-Jones, S., Landini, G. A. R., Al-Zahli, N., ... & Stock, F. (2022). Poor but not by choice (s): The persistence of cognitive biases across economic groups. ([paper link](#))
- Ruggeri, K., Symeonidou, A., Pelica, S., Al-Zahli, N., ... & Ashcroft-Jones, S. (2022). The psychology and policy of overcoming economic inequality. ([paper link](#))