# **Hunter Fong**

# Education

<b>Doctorate of Philosophy – Psychology</b>
Minor in Applied Statistics
New Mexico State University
Master of Arts – Psychology
New Mexico State University
<b>Bachelor of Arts</b> magna cum laude – <b>Psychology</b> 05/2013
Minor in Philosophy and Religion
San Francisco State University

**Career Objectives** 

My work focuses on health and human performance, in all forms. As a psychologist trained in applied statistics and predictive modeling, I am a mixed methods researcher specialized in both quantitative and qualitative methodologies. My most recent work has focused on improving and developing affective computing models to improve interactions with artificial commensal companions (robotic & otherwise). Previous research has involved religiosity, culture, cognition, linguistics, robotics, and UX for space travel. Intended future work is continuing my current research on interaction with artificial companions for applications in space travel.

# **Research Experience**

University of Genoa, COmputational Models of COmmensality for artificial Agents (COCOA), Post-doctoral Fellow (NextGenerationEU funded), June 2024 – Present

Department of Informatics, Bioengineering, Robotics and Systems Engineering

Responsibilities: Experimentation on robotic eating companion in progress.

Centro de Investigación Nebrija en Cognición, Laboratory Coordinator, January 2024 – 2025

<u>Responsibilities:</u> Managing research end-to-end with neuroscience (EEG, eye-tracking, driving simulator, VR) equipment in a lab of multiple PIs.

Google, Principal UX Researcher, November 2022 – May 2023

<u>Responsibilities:</u> Conducted first SiwG/3rd-party research program – research led to new SiwG features and increased adoption; democratized information across 5+ teams from 10+ years; Family Team liaison experience consulting & researching about data privacy for youth (15/40 hrs.)

#### Meta, Senior UX Researcher, December 2021 – November 2022

<u>Responsibilities:</u> Exclusive owner of rolling research program for both the SQL and Python internal tools; conducted & analyzed 18 UX experiments for improving internal data tools and metrics; established organization-wide metrics and improved data democratization across all internal Data Infra. products

#### Dell, Senior UX Researcher, November 2020 – December 2021

<u>Responsibilities:</u> Conducted & analyzed 20+ UX experiments for improving enterprise and commerce platforms; interacted with stakeholders and VPs in an AGILE environment to communicate research

Some Examples of Tests:

#### Active v. Inactive Button (Error Testing):

RITE Test – saved 40 secs. on av., = \$204,800 saved annually (conservative estimate based on 2k users)

#### Filters (Commerce & Enterprise):

RITE Test – saved 50 secs. on av., = \$256,000 saved annually (conservative estimate based on 2k users)

#### **Icon Testing:**

RITE Test – saved 8 secs. on av., = \$40,960 saved annually (conservative estimate based on 2k users)

#### **Empty States Pricing Structure:**

RITE Test - saved 6 secs on av 30,720

Promo Titles: Determined user understanding of promotional titles

**Financing Notification Colors:** Determined user preference and understanding of notifications based on varying design color schemes

**New Features Q3 & Q4 Moderated Sessions:** Qualitative research to determine usability and functionality of new tool in development

**Dashboard Icon Testing:** Determined user preference and understanding of various icons accompanying headers for dashboard sections

<u>Addtl. Tasks:</u> Training Designers for Product Model Assisting Design-Led RITE Testing

#### NASA, Advanced Exercise and Flight Software Developer, August – December 2019

Flight Systems Branch, Johnson Space Center

Physiology Sensing Intelligent Optimization Nucleus Laboratory

Advanced Countermeasure Systems & Exploration Exercise

Software, Robotics, & Simulation Division

Principal Investigator: Phillip Callen

<u>Responsibilities:</u> Programmed haptic response exercise system with Teslasuits; developed security measures for Bluetooth/wifi broker for software control system; developed machine learning model to monitor images of sleeping people to predict future muscular injury, wrote NASA-funded grant for \$150,000.

# Research Assistant, August 2019 – February 2020

Department of Aerospace Engineering, University of Texas, Austin

Human Centered Robotics Laboratory

Principal Investigator: Luis Sentis, Ph.D.

<u>Responsibilities:</u> Assisted in testing of mobile, bipedal robotics systems including Valkyrie

#### Research Assistant, August – December 2019

Department of Aerospace Engineering, University of Texas, Austin

Autonomous Systems Group

Principal Investigator: Ufuk Topcu, Ph.D.

<u>Responsibilities:</u> Assisted in development and testing of drone with 3D printing capabilities

# NASA Neuroscience and Sensorimotor Researcher, June 2019 – August 2019

Human Health & Performance Directorate, Johnson Space Center

**Biomedical Research and Environmental Sciences Division** 

Principal Investigator: Jacob Bloomberg, Ph.D.

<u>Responsibilities:</u> Building predictive models of astronaut post-spaceflight recovery utilizing cardiovascular, vestibular, and sensorimotor astronaut pre-flight data

# Laboratory Manager for SC1 NIH Grant (\$865,000), February 2017 – May 2019

Department of Psychology, New Mexico State University

Hearing, Engineering, and Augmented Reality Laboratory

Principal Investigator: Justin MacDonald, Ph.D.

<u>Responsibilities:</u> Our team designed a gaze-directed hearing aid prototype. Developed haptic systems (TENS & TMS) wearable headband device. Programmed and conducted 5 experiments. General responsibilities included: experiment development, hardware assembly, computer software installation and management, brain stimulation (tDCS & tACS), assisting in stimuli and research production, management of annual budget and performance review, management of graduate and undergraduate research assistants

# Research Assistant, August 2015 – August 2020

Department of Psychology, New Mexico State University

Social Cognition Laboratory

Principal Investigator: David Trafimow, Ph.D.

<u>Responsibilities:</u> Published 6 manuscripts with 5 more in press or preparation; conducted 11 multiple-part experiments

# Laboratory Manager, October 2012 - August 2015

Department of Psychology, San Francisco State University

Language, Attention, and Cognitive Engineering Laboratory

Principal Investigator: Kenneth Paap, Ph.D.

Responsibilities: Published 8 manuscripts; conducted 8 experiments

# Research Assistant, December 2012 – August 2015

Department of Psychology, San Francisco State University

Social Perception, Attitudes, Mental Simulation Laboratory

Principal Investigator: Charlotte 'Chuck' Tate, Ph.D.

Responsibilities: Conducted 5 experiments, managed a graduate thesis as "Project Lead"

#### **Research Assistant,** November 2012

Department of Psychology, San Francisco State University

Culture and Emotion Research Laboratory

Principal Investigator: David Matsumoto, Ph.D.

Responsibilities: Coded 1 micro-expression experiment

# Publications \*Now Fong, previously: Myüz, Johnson

Fong, H., Niewiadomski, R., Mancini, M.(in press). Oxford handbook on computational group and team dynamics. Oxford University Press.

- Fong, H., Soufargi, S., Niewiadomski, R., Mancini, M. (2025). Eating with a Robot: A Social Supplement? In Proceedings of ACM Conference on Human Factors in Computing Systems ('CHI'). ACM, New York, NY, USA, 10 pages.
- Soufargi, S., Niewiadomski, R., Fong, H. Mancini, M. (2025) A Social Robot Companion for Individuals Feeling Alone. In Proceedings of ACM Conference on Intelligent User Interfaces ('IUI'). ACM, New York, NY, USA, 5 pages.
- Hoxha, A., Fong, H., Niewiadomski, R. (2024). Do we need artificial dining companions? Exploring human attitudes toward robots in commensality settings. In *International Conference on Multimodal Interation (ICMI Companion, '24),* November 4-8, 2024, San Jose, Costa Rica. CM, New York, NY, USA, 7 pages. DOI: https://doi.org/10.1145/3686215.3686220
- Šabić E., Hout, M.C., Macdonald, J.A., Henning, D., **Myüz, H.**, & Morrow, A. (2021). Understanding Speech With Our Ears and Eyes. *Frontiers for Young Minds*. 9(5696)2-4. DOI: 10.3389/frym.2021.569624
- Sabic, E., Henning, D., Myüz, H., Morrow, A., Hout, M. C., MacDonald, J. (2020). Examining the role of eye movements during conversational listening in noise. *Frontiers in Psychology*, 11(200). DOI: 10.3389/fpsyg.2020.00200
- Paap, K., Myuz, H., Anders-Jefferson, R., Mason, L., & Zimiga, B. (2019). On the ambiguity regarding the relationship between sequential congruency effects, bilingual advantages in cognitive control, and the disengagement of attention. *AIMS Neuroscience*, 6(4), 282-298. DOI: 10.3934/Neuroscience.2019.4.282
- Myüz, H., Hout, M. C. (2019). Trick, or treat?: How artificial sweeteners fool the brain and body. *Frontiers for Young Minds*, 7(51). DOI: 10.3389/frym.2019.00051
- Trafimow, D., Rodriguez, A., Myüz, H. A., Wang, C., Wang, T. (2019). The precision of research in three top medical journals. *Mental Health & Human Resilience International Journal*. 3(1), 1-5. DOI: 10.23880/mhrij-16000131
- Wang, C., Wang, T., Trafimow, D., & Myüz, H. A. (2019). Desired sample size for estimating the skewness under skew normal settings. *Structural Changes and their Econometric Modeling*. DOI: 10.1007/978-3-030-04263-9\_11
- Trafimow, D., Wang, T., Wang, C., & Myüz, H. A. (2019). Does slight skewness matter? International Journal of Professional Aviation Research, 11(01), 11-24. DOI: 10.22488/okstate.19.100405
- Trafimow, D., & **Myüz, H. A.** (2018). The sampling precision of research in five major areas of psychology. *Behavior Research Methods*. DOI: 10.3758/s13428-018-1173-x
- Wang, C., Trafimow, D., Wang, T., Myuz, H. (2019). Necessary sample sizes for specified closeness and confidence of matched data under the skew normal setting. *Communications in Statistics - Simulation and Computation*. DOI: 10.1080/03610918.2019.1661473

- Trafimow, D., & Myüz, H. A. (2017). Statistical and philosophical issues concerning replicability in clinical research. *Timely Topics in Clinical Immunology*, 1(1), 5-7. https://www.alliedacademies.org/articles/statistical-and-philosophical-issues-concerningreplicability-in-clinical-research.pdf
- Myuz, H., Trafimow, D. (2017). Scrutinizing scruples: Morality as a societally created, needbased system. *Advances in Psychology Research*, *117*. NOVA ISBN: 978-1-63485-962-2
- Paap, K. R., Myuz, H., Anders, R., Bockelman, M., Mikulinsky, R., & Sawi, O. (2017). 'No compelling evidence for a bilingual advantage in switching or that frequent language switching reduces switch cost'. *Journal of Cognitive Psychology*. 29(2), 89-112. DOI: 10.1080/20445911.2016.1248436
- Paap, K. R., \*Johnson, H., & Sawi, O. (2015). Should the search for bilingual advantages in executive functioning continue? *Response to commentaries in Cortex*. DOI: 10.1016/j.cortex.2015.09.010
- Paap, K. R., \*Johnson, H., & Sawi, O. (2015). Bilingual advantages in executive functioning either do not exist or are restricted to very specific and undetermined circumstances. *Invitation for target article from Cortex*. DOI: 10.1016/j.cortex.2015.04.014
- Paap, K. R., Sawi, O., Dalibar, C., Darrow, J., & \*Johnson, H. A. (2015). Beyond panglossian optimism: Larger N2 amplitudes probably signal a bilingual disadvantage in conflict monitoring. *AIMS Neuroscience*, 2(1):1-6. DOI: 10.3934/Neuroscience.2015.1.1
- Paap, K. R., Darrow, J., Dalibar, C., & \*Johnson, H. A. (2015). Effects of script similarity on bilingual advantages in executive control are likely to be negligible or null. *Frontiers in Psychology*, 5:1539. DOI: 10.3389/fpsyg.2014.01539
- Paap, K. R., Sawi, O., & \*Johnson, H. (2014). The brain mechanisms underlying the cognitive benefits of bilingualism may be extraordinarily difficult to discover. Invitation from AIMS Neuroscience, 1(3): 245-256. DOI: 10.3934/Neuroscience.2014.3.245
- Paap, K., \*Johnson, H., & Sawi, O. (2014). Are bilingual advantages dependent upon specific tasks or specific bilingual experiences? *Journal of Cognitive Psychology* 26(6), 615-639.

# **Conference Posters**

- **Myuz, H.**, (2019, March). *Why the proportion of a population collected should be taken into account statistically.* Poster presented at the International Conference on "Science for all—Role towards Development of a Modern World".
- Myuz, H., Trafimow, D. (2017, April). *Does encoding occur during processing, retrieval, or both?* Poster presented at the Graduate Research and Arts Symposium, Las Cruces, NM.
- Myuz, H., Paap, K. (2017, April). Credulously religious or religiously credulous: Potential performance theory as applied to religiosity and credulity. Poster presented at the International Conference on "Science and Technology—New Perspectives and Challenges".

- Paap, K., Sawi, O., Myuz, H. (2016, May). Congruency sequence effects: What good are they? Poster presented at the Cognitive Neuroscience Society Annual Convention, New York, NY.
- Paap, K., Bockelman, M., \*Johnson, H., Eusebio, E., Wagner, S., Avalos, A., Sawi, O. (2015, May). No bilingual advantages across five switching tasks: Better task switchers are not better at switching between categories in tests of verbal fluency. Poster presented at the Association for Psychological Science Annual Convention, New York, NY.
- Paap, K., Bockelman, M., \*Johnson, H., Eusebio, E., Wagner, S., Avalos, A., Sawi, O. (2015, May). *No bilingual advantages across five switching tasks*. Poster presented at a National Science Foundation workshop at the City University of New York, New York, NY.
- Sawi, O., \*Johnson, H., Paap, K. R. (2015, March). Conflict adaptation in bilinguals: the importance of behavioral data in cognitive neuroscience. Poster presented at the Cognitive Neuroscience Society Annual Convention, San Francisco, CA.
- Darrow, J., Dalibar, C., **\*Johnson, H.**, Paap, K. (2015, March). *Does script similarity affect executive function?* Poster presented at the Cognitive Neuroscience Society Annual Convention, San Francisco, CA.
- \*Johnson, H., Sawi, O., & Paap, K. (2015, March). *Language switching in bilinguals is inconsistently linked to executive function*. Poster presented at the Cognitive Neuroscience Society Annual Convention, San Francisco, CA.
- Paap, K., \*Johnson, H. A., & Sawi, O. (2014, November). Early or late, balanced or not, young adult bilinguals do not have enhanced executive functions. Paper presented at the annual Psychonomics Society meeting, Long Beach, CA.
- \*Johnson, H., Freeman, L., Darrow, J., Sawi, O., & Paap, K. R. (2014, May). *Early bilingualism does not lead to bilingual advantages in executive functioning*. Poster presented at the Association for Psychological Science Annual Convention, San Francisco, CA.
- Paap, K., Freeman, L., Cushing, D., Wagner, S., Bockelman, M., & \*Johnson, H. (2014, May). 20,000 flanker task trials: Are the effects stable, reliable, and transferable? Poster presented at the Association for Psychological Science Annual Convention, San Francisco, CA.
- Sawi, O., Darrow, J., \*Johnson, H., & Paap, K. R. (2014, April). *Highly fluent balanced bilingualism does not enhance executive processing*. Poster presented at the Cognitive Neuroscience Society Annual Convention, Boston, MA.

# **Research Talks**

The Proportion of a Population Collected Accounts for More Precision than Sample Size

Graduate Research and Arts Symposium – Data Blitz

New Mexico State University - April, 2019

#### Empirically Religulous: Religiosity is Related to a General Tendency to Believe

Psychology Research Seminar

New Mexico State University, March 2019

#### Skeptical, Yet Religious: Correlational Studies

Graduate Research and Arts Symposium

New Mexico State University – April 2018

#### Haptic Communication in the Rear Hemisphere of the Head

Transforming Lives Through Technology & Empowerment

NeSA 10th International Conference-March 2018

#### No Evidence for a Bilingual Advantage in Switch Costs

Graduate Research and Arts Symposium

New Mexico State University – April 2017

# Credulously Religious or Religiously Credulous: Potential Performance Theory as Applied to Religiosity and Credulity

Science and Technology-New Challenges and Perspectives

NeSA 9th International Conference– April 2017

#### What Luck for Rulers that Men do not Think: The Domain Generality of Credulity

**Psychology Research Seminar** 

New Mexico State University – April, 2016

#### Inconsistently Devout: Potential Performance Theory as Applied to Religiosity and Credulity

Three Minute Thesis Competition

New Mexico State University – April, 2016

# The Incredulous Homunculus: The Folly of Accepting Information at Face Value

Graduate Research and Arts Symposium

New Mexico State University – April 2016

#### Cluster Funk: Does Processing Occur During Encoding or Retrieval?

Delivered in Psychology Research Seminar

New Mexico State University – January, 2016

# Programming

- R
  - .
- Python
- C, C#, C++

Objective C

- MATLAB (+Machine Learning)
- Java

- Excel
- SPSS
- E-Prime
- Haptic systems (TENS & TMS)
- Visual Basics
- Unity 3D
- Unreal Engine 4
- HTML
- SAS

# NASA 2019 Hackathon

Semi-Finalist

# **High Performance (Super) Computing**

16 node system

# **Data Incubator**

Semi-Finalist for Data Science Fellowship

# **Websites Created**

# Professional

pgso.nmsu.edu

sfsu-lace-lab.com

# Personal

hunterfong.com

teamhat.org

# Honors, Awards, & Fellowships

# **Recipient of ASRC Commitments Scholarship**

New Mexico State University, Fall 2018

# **Recipient of National Institute of Health Grant Funding**

New Mexico State University, Spring 2017 - Present

# **Recipient of Graduate Assistant Tuition Fellowship**

New Mexico State University, Fall 2015 – Spring 2017

# **Best Paper Award**

- Actuators
- Brokers (Mosquitto)
- Raspberry Pi & Arduino
- Eye-trackers (Eyelink, Pupil Labs and TOBII)
- AWS
- CSS
- Brain Stimulation (tDCS & tACS

Journal of Cognitive Psychology, 2014

# **Research Featured in Media**

- Mickes, L. (2019). If Only We Could Measure the Entire Population: Sampling Precision Across Subdisciplines of Psychological Science. *Psychonomic Society*. Retrieved from: https://featuredcontent.psychonomic.org/if-only-we-could-measure-the-entire-populationsampling-precision-across-subdisciplines-of-psychological-science/
- Yong, E. (2016). The Bitter Fight over the Benefits of Bilingualism [Review of target article Bilingual advantages in executive functioning either do not exist or are restricted to very specific and undetermined circumstances]. The Atlantic. Retrieved from http://www.theatlantic.com/science/archive/2016/02/the-battle-over-bilingualism/462114/
- Makin, S. (2016, January 4). Does Speaking a Second Language Really Improve Cognition? [Review of Bilingual advantages in executive functioning either do not exist or are restricted to very specific and undetermined circumstances]. Salon. Retrieved from http://www.salon.com/2016/01/04/does\_speaking\_a\_second\_language\_really\_improve\_c ognition\_partner/
- Makin, S. (2015). Debate Rages over Whether Speaking a Second Language Improves Cognition [Review of target article *Bilingual advantages in executive functioning either do not exist or are restricted to very specific and undetermined circumstances*]. *Scientific American*. Retrieved from http://www.scientificamerican.com/article/debate-rages-over-whetherspeaking-a-second-language-improves-cognition/
- Neuroskeptic (2015, December). Do Bilingual People Have a Cognitive Advantage? [Review of target article *Bilingual advantages in executive functioning either do not exist or are restricted to very specific and undetermined circumstances*]. *Discover*. Retrieved from http://blogs.discovermagazine.com/neuroskeptic/2015/12/04/do-bilingual-people-have-a-cognitive-advantage/#.VsPa84-cH4h

# **Teaching Experience**

Interventionist, 2020

IDEA Rundberg, 11th Grade

Guest Teacher, 2020-Present

Texas IDEA Schools K-12, Kokua

# Instructor, 2018-2020

Department of Psychology, New Mexico State University

Courses: Social Psychology, Psycholinguistics, Introduction to Psychology

# Teaching Assistant, 2015-2017

Department of Psychology, New Mexico State University

<u>Courses:</u> Memory, Advanced Research Seminar, Child Development From Conception Through Childhood, Introduction to Psychology,

#### Teaching Assistant, 2014-2015

Department of Psychology, San Francisco State University <u>Courses:</u> Introduction to Research Methods, Social Psychology

# **Teaching Preparation**

#### **Registered Behavior Technician at Behavioral Change Institute**

01/19-01/20

#### Tutor at:

Varsity Tutors -- 05/15-Present

**Learn for a Lifetime --** 05/18-12/18

Early Learning Tree Children's Center – 05/16-08/16

**San Francisco State University** – 08/14-05/15

#### **Teaching Academy**

36+ hours of instruction

#### **Affiliations and Memberships**

Breakline Alumni Association - 2020-Present

**Air Force Association** – 2020

N.A.S.A. Rocketry Club – 2019

N.A.S.A. Intern Social Committee – 2019

N.A.S.A. Pathways Interns for Professional Enhancement – 2019

**Cognitive Neuroscience Graduate Student Organization** – 2018

Secretary – New Mexico State University

**Cognitive Neuroscience Graduate Student Organization** – 2016-2020

**Psychology Graduate Student Organization** – 2015-2020

Psychology Graduate Student Organization - 2016-2017

President – New Mexico State University

American Statistical Association – 2016-Present

#### American Statistical Association – 2016-2020

New Mexico State University Chapter

Association for Psychological Science – 2013-Present

American Psychological Association – 2013-Present

Cognitive Neuroscience Society – 2013-Present

Mensa International Society – 2000-Present

Phi Theta Kappa Honor Society – 2011-2013

**Congressional Youth Leadership Council** – 2007-2010

Alumni Association: Legacy of Leadership

# **Reviewer Experience**

ACM Conference on Human Factors in Computing Systems (CHI2025), February 2025

Elsevier Journal

#### Cognitive Systems Review, August 2024

Elsevier Journal

# **First Multimodal Banquet: Exploring Innovative Technology for Commensality and Human-Food Interaction (CoFI)**, July 2024

University of Genoa – Italy; (held in conjunction with ICMI, Costa Rica)

# 17th Intl. Conference on Advanced Visual Interfaces, June 2024

Arenzano, Genoa -- Italy

# **Mentorship Experience**

#### CyberPatriot U.S.A. Competition – 2019

Course Instructor

#### **Discovery Scholars Program** – 2018-2020

Graduate Student Mentor