

Luella Fu

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EDUCATION

- University of Southern California (USC)**, Los Angeles, California, USA Aug 2012 – Dec 2018
- Doctor of Philosophy (Ph.D.) in Business Administration Dec 2018
 - Emphasis on Statistics
 - Marshall Graduate Assistantship, Marshall 5th Year Fellowship
- Yale University**, New Haven, Connecticut, USA Aug 2011 – May 2012
- Master of Arts (M.A.) in Statistics May 2012
 - Teaching Fellow
- Claremont McKenna College**, Claremont, California, USA Aug 2008 – May 2011
- Bachelor of Arts (B.A.) in Literature and Mathematics (Dual) May 2011
 - Brian and Marilyn Gerich Scholarship

PROFESSIONAL POSITIONS

- Assistant Professor of Mathematics**, SFSU Aug 2018 –
San Francisco, California, USA
- Research Assistant**, USC Marshall Business School Aug 2012 – Aug 2018
Los Angeles, California, USA

RESEARCH

PUBLICATIONS AND WORKING PAPERS

- [1] Basu, P., Fu, L., Saretto, A., and Sun, W. (2020+) “Empirical Bayes FDX control.” *In Progress*.
- [2] Fu, L., Gang, B., James, G., and Sun, W. (2020+) “Ranking Importance of Heteroscedastic Units on a Large Scale.” *In Progress*.
- [3] Fu, L., Gang, B., James, G., and Sun, W. (2020) “Heteroscedasticity-Adjusted Ranking and Thresholding for Large-Scale Multiple Testing.” *Journal of the American Statistical Association*. 0(0):1-13. <https://doi.org/10.1080/01621459.2020.1840992>.
- [4] Banerjee, T., Fu, L., James, G., and Sun, W. (2020) “Nonparametric Empirical Bayes Estimation on Heterogeneous Data.” *Under Review*.
- [5] Fu, L., Jacobs, M. A., Brookover, J., Valente, T. W., Cobb, N. W., and Graham, A. L. (2017) “An exploration of the Facebook social networks of smokers and non-smokers.” *PLOS ONE*.12(11): e0187332. <https://doi.org/10.1371/journal.pone.0187332>.

PEER-REVIEWED & INVITED CONFERENCE TALKS

- [1] Fu, L., James, G., and Sun, W., “The Mountain Comes to Muhammad: Dangers from Using Standardized Statistics in Multiple Testing.” *AMS Western Sectional Meeting, Section on “Big Data and Statistical Analytics”*, San Francisco, CA. Oct 2018.
- [2] Fu, L., James, G., and Sun, W., “Nonparametric Empirical Bayes Tweedie Formula (NEST).” Presented in Section 584 of the *Joint Statistical Meetings 2018 Conference*, Vancouver, British Columbia, Canada. Aug 2018. (paper reviewed by IMS committee for Hainan Award) .
- [3] Fu, L., James, G., and Sun, W., “Nonparametric Empirical Bayes Smoothing Tweedie’s Estimator under Heteroscedasticity.” *Hangzhou International Conference on the Frontiers of Data Science*, Hangzhou, China. May 2018.

**TEACHING
EFFECTIVENESS**

SFSU COURSES AND RATINGS - 1 HIGH, 5 LOW

Course	Students Enrolled	Evaluations	Mean Score (St. Dev.)	Dept. Mean (St. Dev.)
Sp20: MATH761	9	8	1.45 (0.74)	1.79 (1.09)
Sp20: MATH324-06	35	28	1.40 (0.75)	1.79 (1.09)
Fa19: MATH324-06	39	34	1.85 (1.29)	1.91 (1.19)
Fa19: MATH324-05	40	38	2.16 (1.37)	1.91 (1.19)
Sp19: MATH440	41	36	1.83 (1.07)	1.90 (1.19)
Sp19: MATH324	40	33	1.43 (0.85)	1.90 (1.19)
Fa18: MATH324	40	35	2.15 (1.35)	1.92 (1.18)

USC COURSES AND RATINGS - 5 HIGH, 1 LOW

Course	Students Enrolled	Evaluations	Mean Score (St. Dev)
Su16-BUAD310	22	15	4.13 (0.74)

COURSE & PROGRAM DEVELOPMENT

- CSU Mathematics Instructors Learning Community Su2020-Sp2021
Engaged in a yearlong workshop organized by the CSU Institute for Teaching and Learning that focuses on the reading apprenticeship model of teaching, where the focus is to apprentice students into mathematical thinking through equitable, active, and metacognitive learning.
- HI-QLT Online Course Redesign Project Fa2020
Redesigning Math324 to improve student success rates and inclusivity.
- Completed CEETL Online Teaching Community Workshop Su2020
Participated in SFSU CEETL's teaching workshop to learn about and implement active, asynchronous, and equitable learning pedagogies. Obtained the QLT Online Teaching Lab Badge.
- Offered new course Math761: Computational Statistics Sp2020
Designed a graduate course on Monte Carlo simulation, covering topics from random number generation to the Metropolis Hastings algorithm.
- M.S. in Mathematical Data Science Sp2019
Helped develop the new M.S in Statistical Data Science, launched in Spring 2020. Planned new courses, reviewed course descriptions , and prepared material for the website.

**CAMPUS &
COMMUNITY
CONTRIBUTIONS**

EDUCATIONAL OUTREACH

- Recruited URM students to SFSU at Field of Dreams. Nov 2019
- Served as a principle investigator for the SFSU Big Data Summer Program to help non-CS and URM students learn to code through data analysis. Nov 2019

STATISTICAL CONSULTING

- Athletic research: consulted for an industry professional training athletes, gave feedback on how to measure the significance of his company's data. Feb 2020
- Interpreting survey results: helped student reporter parse SFSU's Campus Climate Assessment survey results and conduct statistical tests. May 2019
- Student consulting: gave two students undertaking a project of personal interest input on survey design for a poll on student opinions of campus climate related to Israel-Palestine tensions. Mar 2019
- Educational data consulting: suggested to middle school teacher how to begin parsing data he had collected about the effects of his school garden project on student involvement. Mar 2019

**HONORS &
AWARDS**

- IMS Hannan Graduate Student Travel Award, Vancouver, B.C. 2018
Awarded for student paper "Nonparametric empirical Bayes Estimation on Heterogeneous Data".
- USC Graduate School Travel Grant, Los Angeles 2016
Awarded travel funding to present research at a conference.
- WNAR Student Travel Award, WNAR, Victoria, B.C. 2016
For submission of student paper to IBC2016.