Timothy Reese

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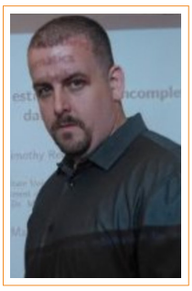

Education

2015–2022 **PhD in Statistics**, *Purdue University*, West Lafayette, Indiana.
Advised by Michael Yu Zhu

2015–2017 **Master of Mathematical Statistics**, *Purdue University*, West Lafayette, Indiana.

2012–2015 **Master of Applied Mathematics**, *California State University of Northridge*.
Advised by Majid Mojirsheibani

2009–2012 **Bachelor of Computer Science**, *California State University of Northridge*.

2009–2012 **Bachelor of Applied Mathematics**, *California State University of Northridge*.

2007-2009 **Associate in Arts: Liberal Arts and Sciences**, *Antelope Valley College*, Lancaster, California.

Publications

[7] Timothy Reese and Yu Michael Zhu. Hierarchically Decodable Output Codes for Transparent Large Scale Image Classification. Submitted, 2022.

[6] Timothy Reese and Yu Michael Zhu. *LB-CNN: Convolutional Neural Network with Latent Binarization for Large Scale Multi-class Classification*, pages 193–214. Springer Singapore, Singapore, 2022.

[5] Timothy Reese and Michael Zhu. LB-CNN: Convolutional Neural Network with Latent Binarization for Large Scale Multi-class Classification. In *2020 19th IEEE International Conference on Machine Learning and Applications (ICMLA)*, pages 142–147, 2020.

[4] Yukai Zou, Ikbeom Jang, Timothy G. Reese, Jinxia Yao, Wenbin Zhu, and Joseph V. Rispoli. Cortical and subcortical contributions to predicting intelligence using 3d convnets. In Kilian M. Pohl, Wesley K. Thompson, Ehsan Adeli, and Marius George Linguraru, editors, *Adolescent Brain Cognitive Development Neurocognitive Prediction*, pages 176–185, Cham, 2019. Springer International Publishing.

[3] Majid Mojirsheibani and Timothy Reese. Kernel Regression Estimation for Incomplete Data with Applications. *Statistical Papers*, 58(1):185–209, 2017.

[2] Timothy Reese and Majid Mojirsheibani. On the Lp Norms of Kernel Regression Estimators for Incomplete Data with Applications to Classification. *Statistical Methods & Applications*, 26(1):81–112, 2017.

[1] Timothy Reese and Majid Mojirsheibani. Kernel regression estimation for incomplete data. Master's thesis, Department of Mathematics at California State University of Northridge, Northridge, CA 91330, 2015.

Presentations

December 2020 ICMLA, *LB-CNN: Convolutional Neural Network with Latent Binarization for Large Scale Multi-class Classification*, Short Paper.

July 2018 Huzhou Teachers College, *Delivered a Two-Day Deep Learning Workshop*, Huzhou, China.

Reviewer Service

2022 (BMVC) British Machine Vision Conference.

2021 (BMVC) British Machine Vision Conference.

2020 (BMVC) British Machine Vision Conference.

Teaching Experience

2022-Current STAT301 Elementary Statistical Methods: Visiting Assistant Professor of Statistic, *Purdue University Department of Statistics*, West Lafayette, Indiana.

2019-2022 STAT225 Introduction to Probability: Head Teaching Assistant, *Purdue University Department of Statistics*, West Lafayette, Indiana.

2017-2019 STAT225 Introduction to Probability: Graduate Lecturer, *Purdue University Department of Statistics*, West Lafayette, Indiana.

2016-2017 STAT301 Elementary Statistical Methods: Head Teaching Assistant, *Purdue University Department of Statistics*, West Lafayette, Indiana.

Summer 2017 STAT301 Elementary Statistical Methods: Graduate Lecturer, *Purdue University Department of Statistics*, West Lafayette, Indiana.

2015-2016 STAT301 Elementary Statistical Methods: Teaching Assistant, *Purdue University Department of Statistics*, West Lafayette, Indiana.

2012-2015 Integral and Differential Calculus, College Algebra, & Mathematical Ideas: Teaching Associate, *CSUN Department of Mathematics*, Northridge, California.

2011-2012 Supplemental Instructor and Subject Area Tutor, *CSUN Learning Resources Center*, Northridge, California.

Selected Awards & Recognitions

2022 Teaching Academy Graduate Teaching Award, Purdue University

2020 Teaching Academy Graduate Teaching Award, Purdue University

2017 Outstanding Teaching Assistant Award, Purdue University

2015 Certificate of Outstanding Academic Achievement, CSU Northridge

2012 James R. Simpson Merit Scholarship, CSU Northridge

Computer skills

Programming Languages: C++ ●●○○○ JAVA ●●○○○ MATLAB ●●○○○ Python ●●●●○ R ●●●○○ SAS ●●○○○ VBA-Excel ●●○○○

Deep-Learning Libraries: PyTorch ●●●●○ TensorFlow ●●●○○

Selected Projects

COVID-19 Vaccine Development Tracking

- Developed automated web-scrapping tools for monitoring COVID vaccine progress.
- Created an interactive interface to display financial information of the change in valuation of publicly traded companies working on COVID-19 vaccine from the start of COVID.
- Managed a website on AWS to publicly convey the information. (No-longer in operation)

Automated Grade-book Tool

- Developed a tool to automate the conversion process for the Predisco e-Learning grade-book and Purdue's learning management system for STAT301.
- The tool was built using visual basic and excel spreadsheets.
- The automation tool greatly reduced the workload for the graders of the course.

Electronic Health Record Prototype

- Developed a prototype that utilized visual basic in an integrated manner with excel spreadsheets to automate the processing of patient data.
- The prototype automated the workflow for day to day activities.
- The prototype automated the conversion of pdfs and word documents into an excel spread sheet database.