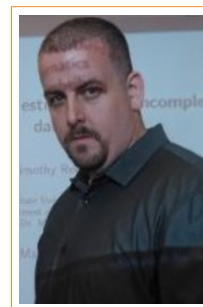


# Timothy Reese

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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. *LB-CNN & HD-OC, Deep Learning Adaptable Binarization Tools for Large Scale Image Classification*. PhD thesis, Purdue University, 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

- 2023 (BMVC) British Machine Vision Conference.
- 2022 (BMVC) British Machine Vision Conference.
- 2021 (BMVC) British Machine Vision Conference.
- 2020 (BMVC) British Machine Vision Conference.

## Teaching Experience

- Summer 2023-Current STAT350 Introduction To Statistics: Course Coordinator, *Purdue University Department of Statistics*, West Lafayette, Indiana.
  - Coordinated and oversaw the overall course structure, content, and educational materials.
  - Led a team of teaching assistants and Visiting Assistant Professors to ensure alignment in teaching approaches and materials.
  - Improved the curriculum, including lectures, assignments, and assessments, to meet the highest educational standards.
  - Spearheaded the transition of the homework platform from LON CAPA to Edfinity, improving accessibility and streamlining the student learning experience.
- Spring 2023 STAT350 Introduction To Statistics: Visiting Assistant Professor of Statistic, *Purdue University Department of Statistics*, West Lafayette, Indiana.
- 2022-2023 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

- AI Server Management and Video Transformation
- Spearheaded the setup and proficient management of a high-performance GPU server to orchestrate cutting-edge AI models.
  - Captured motion from 2D videos, converting the actions of human actors into immersive 3D models using advanced AI technologies.
  - Orchestrated voice cloning and language translation processes to expand the project's potential global impact.
- COVID-19 Vaccine Development Tracking
- Developed automated web-scraping 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 spreadsheet database.