- Yackley, J. ""Enhancing Automated Software Refactoring via Simultaneous Testing, Dependency Analysis, and Examining Multi-level Software Quality Concerns", PhD Dissertation (Co-Advisor - completed April 2022)
- Abid, C. "Explainable, Security-Aware and Dependency-Aware Framework for Intelligent Software Refactoring", PhD Dissertation (Committee Member completed November 2021)
- Almhana, R. "Intelligent Software Bugs Localization, Triage and Prioritization", PhD Dissertation (Committee Member completed October 2021).
- Rebai, S. "Commits Analysis for Software Refactoring Documentation and Recommendation", PhD Dissertation (Committee Member completed August 2021)
- Alizadeh, V. "A User-aware Intelligent Refactoring for Discrete and Continuous Software Integration", PhD Dissertation (Committee Member completed April 2020).
- Rashid, J., "Topic Modeling for Text Mining and Information Retrieval Through Machine Learning", PhD Dissertation, University of Engineering & Technology, Taxila, (External Reviewer - completed September 2019).
- Alhazi, B. "Information Systems Migration as an Optimization Problem: Case Studies on Refactoring Model Transformations", PhD Dissertation (Committee Member completed June 2019).
- Wang, H., "An Automated Refactoring Framework for Web Services", PhD Dissertation, (Committee Member completed December 2017).
- Dea, T., "Interactive Search-based Software Engineering Using Machine Learning and Computational Search: Case Studies on Software Maintenance and Evolution", PhD Dissertation, (Committee member completed July 2017).
- Haider, K., "Intelligent Gender Identification Using Diverse Facial Features in Different Conditions", PhD Dissertation, University of Engineering & Technology, Taxila, (External Reviewer - completed July 2017).

- Maqsood, M., "Quranic Recitation Pronunciation Modeling and Analysis", PhD Dissertation, University of Engineering & Technology, Taxila, (External Reviewer completed April 2017).
- Javid, A., "Event Driven Video Summarization for Sports", PhD Dissertation, University of Engineering & Technology, Taxila, (External Reviewer completed November 2016).
- Mansoor, U., "Detection, Merging, and Recommendation of High-Level Changes Using Multi-Objective Optimization", PhD Dissertation, (Committee Member completed November 2016).
- Sahin, D., "Search-Based Software Refactoring: A Multi-Level Framework", PhD Dissertation, (Committee Member - completed October 2016)
- Mkaouer, M., "Balancing Competing Needs of Machine and Human in Search-Based Software Engineering", PhD Dissertation, (Committee Member completed April 2016).
- Petrenko, M. "Managing Program Dependencies in Software Evolution", PhD Dissertation, Wayne State University, (Committee Member - completed, October 2009).
- Fife, B. "Students' Concept Patterns Revealed by Computer Analysis of Language-Constrained Science Concept Maps", EdD Dissertation Committee, Educational Technology Program, University of Michigan, Ann Arbor. (Committee Member completed August 1997).
- Balkany, A. "The Flexible Construction of Knowledge Systems with the Domain-Independent Design System (DIDS)", PhD Dissertation Committee, Electrical Engineering and Computer Science Department, University of Michigan, Ann Arbor (Committee Member PhD Candidate, 1994).
- Runkel, J. "Generating Non-Brittle Model-Based Knowledge-Acquisition Tools", PhD Dissertation Committee, Electrical Engineering and Computer Science Department, University of Michigan, Ann Arbor (Committee Member PhD Candidate, 1994).

- Necovski, J. "Game Creation Environment", Master's Thesis, (MS Advisor expected December 2022).
- Adrian, D. "Odd Meters in Generated Music for Video Games", (MS Advisor expected December 2022).
- Hamad, A. "Two Wheelistic: Development of a High-Fidelity Virtual Reality Simulator of Transportation Safety Research", Master's Thesis, (MS Committee Member completed April 2021).
- Niewiadomski, L. "Incorporating Model-Based User Requirements in Product Development", Master's Thesis (MS Advisor - Completed April 2021).
- Sagherian, A. "Understanding Learning Progressions via Automatic Scoring of Visual Models", Master's Thesis, (MS Committee Member - completed April 2020).
- Ganesan, G. "An Empirical Study of the Correlation Between Code Smells and Software Bugs", Master's Thesis, (MS Committee Member completed December 2018).
- Skaf, H., "Dimensionality Reduction of Quality Objectives for Web Services Modularization", Master's Thesis, (MS Committee Member completed May 2018).
- Rajendra, V. "Characterization and identification of distraction during naturalistic driving using wearable a non-intrusive physiological measure of Galvanic Skin Responses", Master's Thesis, (MS Committee Member completed March 2018).
- Wang, B. "An Empirical Evaluation of Algorithms for Computing Equilibria in Games for Approximate Inference in Large Dimensional Probabilistic Graphical Models", Master's Thesis, (MS Committee Member completed November 2017).
- Melville, A. "An Automatic System for Characterization and Detection of Ocular Noise", Master's Thesis, (MS Committee Member completed April 2017).
- Hassouna, T. "Detection of Web Service Refactoring Opportunities by Example", Master's Thesis, (MS Committee Member completed December 2016).

- Tama, N. "Scheduling of Refactoring Opportunities Using Computational Search", Master's Thesis, (MS Committee Member completed December 2016).
- Shahzadi, S., "Unified Agile Testing Framework for Mobile Applications", University of Engineering & Technology, Taxila, Master's Thesis, (Co-Adviser completed August 2016).
- Weiss, B., "Examining the Relationship Between Age and Instrument Cluster Design Preference", Master's Thesis, (MS Committee Member - completed August 2016).
- Nemala, V., "Model Transformation Testing: A Bi-level Search-Based Software Engineering Approach", Master's Thesis, (MS Committee Member - completed April 2015).
- Boyina, R., "On the Use of Quality Attributes for Software Refactoring, Master's Thesis, (MS Committee Member Completed December 2014).
- Namburu, S., November 2014, "Detection of High-level Model Changes as a Multi-Objective Optimization Problem, Master's Thesis, (MS Committee Member completed November 2014).
- Alnofal, M. "Model Merging as a Multi-Objective Problems", Master's Thesis, (MS Committee Member - Completed January 2014).
- Varadajan, A. "Design and Implementation of an Efficient Learning Tool for Pen Based Devices", Master's Thesis, (MS Committee Member - completed May 2006).
- Lamba, A. "Design of Corporate Networks", Master's Thesis, Chair, (Candidate, 2002).
- Crossman, J. "Advanced Signal-Based Diagnostics for Vehicle Fault Detection", Master's Thesis, (MS Committee Member completed August, 2000).
- Skene, T. "Volunteers United", CIS 695, (expected completion August 2022).
- Skene, T. "Autonomous Vehicle Simulator", CIS 695, (expected August 2022).

- Limbaugh, T. "Music Improvisation Machine Learning Experiment", CIS 695, (expected August 2022.
- Graf, P. "VR Animation Toolset", CIS 695, Winter 2022.
- Horton, A. "Automating Custom Client Software Packages and Deployments for a .NET Framework Web Application", CIS 695, Winter 2022.
- Stark, N. "Chef Quest", CIS 695, Winter 2022.
- Turner, S. "Student Enroll Software", CIS 695, Fall 2021.
- El-Haik, A. "Autonomous Vehicle Simulator", CIS 695, Summer 2021.
- Hobby, M. J. "Henchman: A Career in Minor Villainy", CIS 695, Winter 2021.
- Leu, C. J. "Remind Me: Inventory and Event Reminder Web App", CIS 695, Winter 2021.
- Lorenzetti, C. "Get Up to Code!", CIS 695, Winter 2021.
- Roy, S. "Fake News Detection Using Machine Learning Algorithms", CIS 695, Winter 2021.
- Shakir, A. "Alien Invasion", CIS 695, Summer 2020.
- Cotter, J. "Virtual Automotive Controls Feature Simulation", CIS 695, Winter 2020.
- Dashti, A. "Dead by Dying Light", CIS 695, Winter 2020.
- Bhamidipati, S. "Effects of Twitter on Stock Market", CIS 695, Fall 2019.
- Gayton, C. "Sector 12 Survival", CIS 695, Fall 2019.
- Majid, S. "Amazon TV Game", CIS 695, Fall 2019.
- Alhaidar, M. "LightUp Mobile Game", CIS 695, Winter 2019.
- Balakrishna, D. "Location-based Insurance Compliant Personal Healthcare Assistant", CIS 695, (Committee Member), Fall 2018.

- Tanaka, M. "TCP vs UPP for Gaming Network", CIS 695, Summer 2018.
- Houren, S. "Dr. Mortimer's Motel of Terror", CIS 695, Winter 2018.
- Meyers, A. "Developing AI for 2d side-scroller", CIS 695, Winter 2018.
- Sisk, J. "User Experience Design for 2d side-scroller", CIS 695, Winter 2018.
- York, P. "Method of Visualizing Four Dimensional Objects", CIS 695, Summer 2017.
- Kodali, S., "Food Finder: Calorie-Driven Customized Food Ordering System, CIS 695, Winter 2017, (K. Akingbehin, chair).
- Mullins, N. "A/B Testing of the Process Improvement Game", CIS 695, Winter 2017.
- Randhawa, R. "Reconfigurable Online Retail Store", CIS 695, Winter 2017, (K. Akingbehin, chair).
- Klanderman, J., "3D Virtual Reality Framework for Mobile Devices", CIS 695, Summer 2016,
- Sandoval, F., "Unreal 4 to Embedded System Blueprint", CIS 695, Winter 2016.
- Smith, E., "Moon Fright", CIS 695, Winter 2016.
- Palmer, N., "Worldtrak Contract Manager", CIS 695, Fall 2015.
- Wegner, B., "Design and Implementation of a Corporate Management Reporting Information System", CIS 695, Fall 2015.
- Schroeder, B., "Natural Language Query Reporting", CIS 695, Fall 2014.
- Fielden, M. "Android OCR App for Check Splitting", CIS 695,

Winter 2014.

- Joyce, J. "Design of Game AI for Cyber Stalking Game", CIS 695, Winter 2014.
- Holbert, B. "Defense Mentor", CIS 695, Fall 2013.
- Wong, I. "Web System", CIS 695, Fall 2013.
- Chung, K. "Kick Brick Game", CIS 695, Summer 2013.
- Ellis, M. "Network Configuration Tool", CIS 695, Summer 2013.
- Sabada, J. "CIS Lab Administration Software", CIS 695, Summer 2012.
- Moilanen, D. "Geo-Tag Visualization", CIS 695, Winter 2012.
- Habib, P. "Accushade iPhone Mobil Formula Retrieval System Application", CIS 695, Winter 2011.
- Crowder, C. "Virtualization of the AGN Network ", CIS 695, Fall 2010.
- Sable, M. "3D Game Combat System", CIS 695, Fall 2010.
- Wilkins, P. "Tile-based Game Map Editor", CIS 695, Fall 2009.
- Dutton, M. "Case Study on Project Lead Experience", CIS 695, Fall 2009.
- Miller, J. "HabuNetwork: A Real Time Network Engine for Three Dimensional Simulations", CIS 695, Fall 2009.
- Reterstorf, M. R. "Continuous Improvement and Cost Reduction", CIS 695, Summer 2009.
- Martineau, N. "Intelligent Tutoring System for Immersive Game Environment", CIS 695, Fall 2008.
- Myers, C. "CSS Structural Analysis Ruleset Visualizer", CIS 695, Fall 2008.
- Haddad, O. "Automated Process Area to CMMI Levels", CIS 695, Summer 2008.

- Watson, J. "Scoreboard Video Graphics", CIS 695, Summer 2008.
- Nelson, K. "A Comparison of the Nintendo GameCube TDEV vs. Microsoft XBOX 360 XNA Development Systems", CIS 695, Fall 2007.
- Schmoll, J. "An In-Depth Evaluation of the Microsoft XNA Development Middleware and XNA Creators Club", CIS 695, Fall 2007.
- Beehler, R. "Automatic Tester", CIS 695, Summer 2007.
- Hammill, J. "Networked Game Design", CIS 695, Winter 2007.
- Lee, P. "Web-Based Learning System", CIS 695, Winter 2007.
- Afinni, Y. "Document Management System Software Process Improvement", Summer 2006.
- Muratov, F. "Web-Based Photo Archive", CIS 695, Winter 2006.
- Klemish, M. "Intranet Based on MISRA Tool", CIS 695, Summer 2005.
- Srinivasan, M. "A Case: Study: Implementation of Customer-Driven Software Metrics on Statistical Software Package", CIS 695, Summer 2005.
- Alphonso, P. "Family Resource Management and Cohesion in Social Networks", CIS 695, Winter 2005.
- Kruass, A. "3D Game Engine", CIS 695, Winter 2005.
- Kucab, J. "Premium Layouts Website", CIS 695, Winter 2005.
- Maratea, M. "3D Game Engine", CIS 695, Winter 2005.
- Voss, R. "Case Study: Application of Six Sigma to Just-In-Time Material Flow System", CIS 695, Winter 2005.
- Baker, M. "Enhanced Game AI Development Library", CIS 695, Fall 2004.
- Dong, S. "Automation of Quality Audit System", CIS 695,

Fall 2004.

- Griffen, M. "Neural Checkers: A Checkers Like Game", CIS 695, Fall 2004.
- Rose, A. "Process Quality Audit Electronic Bill of Material", Cis 695, Fall 2004.
- Greenberg, I. "Generic Wireless Device Driver", CIS 695, Summer 2004 (K. Akingbehgin, chair)
- Michalek, J. "Implementing the CAN Calibration Protocol", CIS 695, Winter 2004.
- Adams, D. "Analysis and Recommendations for Applying Best Practices to Improve Software Development Process for Software Components that Contain External Computer Interfaces", CIS 695, Summer 2003.
- Alomari, S. "Optimistic Algorithm for Distributed Transactions in Jini Algorithms and Implementations", CIS 695, Winter 2003.
- Dibble, R. "Nine Men's Morris: A Software Implementation", CIS 695, Winter 2003.
- El-Mokadem, J. "Sharelink: Document Management and Collaboration", CIS 695, Winter 2003.
- Barna, M. "Analysis and Design of an Automobile Service Information System", CIS 695, Fall 2002.
- Fouani, S. "PC Controls Website", CIS 695, Fall 2002.
- Rayford, E. "Automated Testing System", CIS 695, Fall 2002.
- Vidershain, D. "On-line Photo Album", CIS 695, Fall 2002.
- Yakushev, A. "Commerce Park Library Program", CIS 695, Fall 2002.
- Imam, D. "Employee Stock Option Plan: OptionNet Web System", CIS 695, Summer 2002.
- Mohammed, G. "Proposal for a Private School Database Project", CIS 695, Summer 2002.

- Puroll, B. "Software Risk Management in the Development of Automotive ECUS", CIS 695, Summer 2002.
- Abad, M. "Implementing a Requirements Tracking Process", CIS 695, Winter 2002.
- Divinagracia, H. "Part Number Analysis Tool", CIS 695, Winter 2002.
- Luong, T. "Software Bugs and Software Change Control Issues Tracking System", CIS 695, Winter 2002.
- Otieno, D. "Project Sphere", CIS 695, Winter 2002.
- Jager, B. "Metrics of the BCBSM Find Your Representative Application", CIS 695, Fall 2001.
- Trescott, R. "Knowledge Management and Engineering an Important Commercial Offspring of Artificial Intelligence, CIS 695, Fall 2001 (MSSWE).
- Burrows, T. "Fast Draw Timer", CIS 695, Summer 2001.
- Hayton, S. "Artificial Intelligence in Abalone", CIS 695, Summer 2001.