

## Wei (Vivien) Shi, Ph.D.

Assistant Professor  
Department of Engineering and Technology  
Texas A&M University-Commerce  
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### Education

- **Ph.D. (2012), Electrical Engineering**, New Jersey Institute of Technology, Newark, New Jersey.
- **M.S. (2008), Electrical Engineering**, Hebei University of Technology, China.
- **B.S. (2005), Electrical Engineering**, Nanjing University of Aeronautics and Astronautics, China.

### Academic Positions

- **Assistant Professor**, Dept. of Engineering & Technology, Texas A&M University-Commerce, 2017-present.
- **Associate Professor**, Dept. of Engineering & Technology, University of Wisconsin-Stout, 2015-2017.
- **Program Director, Master of Science in Manufacturing Engineering Program**, UW-Stout, 2014-2017.
- **Assistant Professor**, Dept. of Engineering & Technology, University of Wisconsin-Stout, 2012-2015.
- **Instructor**, Dept. of Electrical & Computer Eng., New Jersey Institute of Technology, 2008-2011.

### Professional Interests

- **Control Systems and Automation**                      - **Robotics**

### Research

#### Research Grants Received:

| Project Title  | Funding Agency             | Amount           | Period    | Role & Note |
|--|----------------------------|------------------|-----------|-------------|
| NSF/REU Site: Interdisciplinary Research Experiences in Robotics for Assistive Technology  | NSF                        | <b>\$230,400</b> | 2015-2017 | PI          |
| NSF/MRI: Acquisition of a Novel Assistive Robot Arm for Collaborative Research in Assistive and Rehabilitation Robotics at a Predominantly Undergraduate Institution | NSF                        | <b>\$39,339</b>  | 2015-2017 | PI          |
| Wisconsin Teaching Fellowship in Research of Interdisciplinary Engineering Teaching  | UW System                  | <b>\$6,000</b>   | 2016-2017 | PI          |
| Fulton and Edna Holtby Endowed Chair Award   | UW-Stout                   | <b>\$50,000</b>  | 2015-2016 | PI          |
| Interdisciplinary Research for Undergraduates Targeting First Generation and Underrepresented Minority Students  | UW-Stout                   | <b>\$10,000</b>  | 2015      | PI          |
| Development of an Active Learning Environment through a Combination of Project-Based Learning Activities   | Engineering Information F. | <b>\$14,592</b>  | 2013-2014 | PI          |
| Biomedical Robotics for Rehabilitation System  | UW-Stout                   | <b>\$10,000</b>  | 2012-2013 | PI          |

#### Publication-Journal Papers:

- **Wei V. Shi**, "Sensors Applied in Healthcare Environments," *Journal of Computer and Communications*, vol.4, pp.99-106, 2016.
- **Wei Shi**, "Recent Advances of Sensors for Assistive Technologies," *Journal of Computer and Communications*, vol.3, pp.80-87, 2015.
- **Wei Shi**, "A Survey on Assistive Technologies for Elderly and Disabled People," *Journal of Mechatronics*, vol.3, pp.121-125, 2015.
- **Wei Shi**, "A Novel Design of Fuzzy PID Controllers for Dual-Sensor Cardiac Pacemaker Systems," *Journal of Applied Biosensor*, vol.2, pp.29-38, 2013.
- **Wei Shi** and M.C. Zhou, "Optimal Single-Pulse for Pacemakers Based on a Sinoatrial Model," *IEEE/ASME Transactions on Mechatronics*, vol.18, pp.348-354, 2013.

- **Wei Shi**, "Implementation of Autonomous Robotic Vehicle Control System Based on LabVIEW and PID Controller," *Industrial Control Computer*, vol.26, pp.75-77, 2013.
- **Wei Shi**, "Advanced Intelligent Control of Cardiac Pacemaker Systems Using a Fuzzy PID Controller," *International Journal of Intelligent Control and Systems*, vol.18, pp.28-34, 2013.
- **Wei Shi**, "Design on Two-link Robotic Arm Control System," *Industrial Control Computer*, vol.26, pp.71-72, 2013.
- X. Liu, C.M. Mi, Y.Y. Wang, and **Wei Shi**, "Optimal Train Size and Headway for Urban Rail Transit System," *Applied Mechanics and Materials*, vol.253-255, pp.2020-2023, 2013.
- **Wei Shi** and M.C. Zhou, "Body Sensors Applied in Pacemakers: A Survey," *IEEE Sensors Journal*, vol.12, pp.1817-1827, 2012.
- **Wei Shi** and X.J. Liu, "Study on Precision Nano-positioning System Based on ZV shaper," *Industrial Control Computer*, vol.25, pp.71-74, 2012.

**Publication-Conference Papers:**

- A.Peng, R.Nelson, C.Liu, A.Turkmen, and **Wei Shi**, "Design and Development of a Hybrid Instructional Model for a Computer Engineering Course," *ASEE North Midwest Section Conf.*, North Dakota, pp.140-146, 2013.
- **Wei Shi**, A.Turkmen, C.Liu, R.Nelson, J.Bumblis, and D.Olson, "Project-Based and Active Learning in Computer Engineering Education," *ASEE North Midwest Section Conference on Active Learning in Engineering Education*, St. Cloud State University, MN, 2012.
- A.Turkmen, C.Liu, **Wei Shi**, R.Nelson, J.Bumblis, and D.Olson, "Technical and Pedagogical Issues with Embedded System Engineering Education," *ASEE North Midwest Section Conference on Active Learning in Engineering Education*, St. Cloud State University, MN, 2012.
- **Wei Shi** and X. Liu, "Phase Resetting and Locking with Single Pulse Perturbation in Bio-Systems," *AIP Conf. Proceedings-Sixth Global Conf. on Power Control & Optimization*, pp.208-214, Las Vegas, 2012.
- **Wei Shi** and M.C. Zhou, "Fuzzy PID Controllers for Dual-Sensor Pacing Systems in Patients with Bradycardias at Rest," *Proceeding of IEEE International Conf. on Systems, Man and Cybernetics*, Alaska, pp.1117-1122, 2011.
- **Wei Shi** and M.C. Zhou, "Recent Advances of Sensors for Pacemakers," *IEEE International Conference on Networking, Sensing and Control*, The Netherlands, pp.520-525, 2011.
- **Wei Shi**, T. Chang, and M.C. Zhou, "Method to Detect Cardiac Abnormalities Based on Electrocardiography and Sinoatrial Pacemaker Model," *IEEE International Conference on Mechatronics & Automation*, pp.566-571, 2010.