**Biographical Sketch**

Larry D. Pyeatt

Associate Professor

Department of Mathematics and Computer Science

South Dakota School of Mines and Technology

501 East Saint Joseph Street

Rapid City, SD 57701-3995

### A. PROFESSIONAL PREPARATION

|  |  |  |
| --- | --- | --- |
| **College/University** | **Major** | **Degree and Year** |
| **Texas Tech University** | **Computer Science** | **Bachelor of Science, 1988** |
| **Texas Tech University** | **Computer Science** | **Master of Science, 1991** |
| **Colorado State University** | **Computer Science** | **Doctor of Philisophy, 1999** |

### B. ACADEMIC/PROFESSIONAL APPOINTMENTS

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| --- | --- | --- |
| **Title** | **Employer** | **Dates** |
| **Associate Professor** | **South Dakota School of Mines and Technology** | **8/2012–present** |
| **Associate Department Chair** | **Texas Tech University at Abilene** | **1/2008–7/2010** |
| **Associate Professor** | **Texas Tech University** | **1/2006–7/2012** |
| **Visiting Assistant Professor** | **University of Missouri, Rolla** | **1/2005–12/2005** |
| **Assistant Professor** | **Texas Tech University** | **9/1999–12/2004** |
| **Lecturer** | **Colorado State University,** | **9/1998–9/1999** |
| **Senior Information Systems Programmer** | **Texaco Inc.** | **9/1991–9/1993** |

### C. PUBLICATIONS

Closely Related to Proposal

[1] Kyle A. Caudle, Christer Karlsson, and Larry D. Pyeatt. Multivariate wavelet density estimation for streaming data: A parallel programming approach. In *JSM Proceedings, Statistical Computing Section*, Alexandria, VA, 2014. American Statistical Association.

[2] Arisoa S. Randrianasolo and Larry D. Pyeatt. Q-learning: From computer network security to software security. In *Proceedings of the 13th International Conference on Machine Learning and Applications*, Detroit, Michegan, December 2014. IEEE, IEEE Press.

[3] Arisoa S. Randrianasolo and Larry D. Pyeatt. A theoretical Q-Learning temporary security repair. In *Proceedings of the 2014 IEEE Symposium Series on Computational Intelligence*, Orlando, Florida, December 9–12 2014. IEEE, IEEE Press.

[4] Arisoa Randrianasolo and Larry D. Pyeatt. An artificial immune system based on Holland’s classifier as network intrusion detection. In *Proceedings of the 4th International Conference on Agents and Artificial Intelligence (ICAART)*, Valamoura, Algarve, Portugal, February 2012. Institute for Systems and Technologies of Information, Control and Communication (INSTICC).

[5] Eddy C. Borera and Larry D. Pyeatt. Offline policy optimization: Using online Monte Carlo simulation-based techniques to deal with changes in dynamic environments. In *Proceedings on the IEEE International Conference on Intelligent Computing and Intelligent Systems (ICIS)*, Guangzhou, China, November 18–20 2011.

Other Significant Publications

[1] Brett L Moore, Larry D Pyeatt, Vivekanand Kulkarni, Periklis Panousis, Kevin Padrez, and Anthony G Doufas. Reinforcement learning for closed-loop propofol anesthesia: A study in human volunteers. *Journal of Machine Learning Research*, 15:655–696, 2014.

[2] Arisoa Randrianasolo and Larry D. Pyeatt. Using local regression in Monte Carlo search tree. In *Proceedings of the 4th International Conference on Agents and Artificial Intelligence (ICAART)*, Valamoura, Algarve, Portugal, February 2012. Institute for Systems and Technologies of Information, Control and Communication (INSTICC).

[3] Eddy C. Borera, Brett L. Moore, Anthony G. Doufas, and Larry D. Pyeatt. An adaptive neural network filter for improved patient state estimation in closed-loop anesthesia control. In *Proceedings of the IEEE International Conference on Tools with Artificial Inteligence (ICTAI)*, Boca Raton, Florida, USA, November 7–9 2011.

[4] Arisoa Randrianasolo and Larry D. Pyeatt. Applying context-based prediction in adversarial Watkins’ *Q*(λ) learning. In *Proceedings of the 2011 International Conference on Artificial Intelligence, ICAI 2011*, Las Vegas, Nevada, July 2011. CSREA Press.

[5] Shubham Shukla and Larry D. Pyeatt. A guided learning algorithm for solving traveling salesman problem. In *Proceedings of the 2011 International Conference on Artificial Intelligence, ICAI 2011*, Las Vegas, Nevada, July 2011. CSREA Press.

### D. SYNERGISTIC ACTIVITIES

• Developing Assembly Language course with hands-on use of the Raspberry Pi, a low-cost Linux based computer.

• Under contract to publish Assembly Language textbook with Elsevier in 2015.

### E. COLLABORATORS AND OTHER AFFILIATIONS

#### Collaborators and Co-Editors

Eddy C. Borera (Lipscomb University), Anthony G. Doufas (Stanford University Medical Center), Vivek Kulkarni (Stanford School of Medicine), Brett L. Moore (Kinetic Concepts, Inc), Mahdi Naser-Moghadasi (American Airlines), Periklis Panousis (Stanford University School of Medicine), Arisoa Randrianasolo ( Lipscomb University), and Shubham Shukla (Amazon.com)

#### Graduate Advisors and Postdoctoral Sponsors

Adele E. Howe (Colorado State University) and William J. B. Oldham (Texas Tech university)

#### Thesis Advisor and Postgraduate-Scholar Sponsors

Advised the following 17 graduate students: Tetsuya Idota (South Dakota School of Mines and Technology), Eddy C. Borera (Lipscomb University), Roger Coffey (Current affiliation unknown), Derik Dalton (Current affiliation unknown), Bharani Ellore (Current affiliation unknown), Karan Gupta (Current affiliation unknown), Julian Hooker (Current affiliation unknown), Srividya Kona (Current affiliation unknown), ChengCheng Li (Current affiliation unknown), Brett L. Moore (Kinetic Concepts), Inc), Mahdi NaserMoghadasi (American Airlines), Krishnan Pazhayanoor (Current affiliation unknown), Todd Quasny (NASA), Arisoa Randrianasolo (Lipscomb University), Shubham Shukla (Amazon.com), and Amit Yadav (Current affiliation unknown). Nguyen Bach (Current affiliation unknown), Ajay Bansal (Current affiliation unknown),