Mitchell Spryn
(757)814-8841
mitchell.spryn@gmail.com
www.mitchellspryn.com

Academic Highlights

Dual Bachelor of Science in Electrical Engineering and Physics at The University of Alabama May 2015
Minor in Mathematics at The University of Alabama May 2015
GPA: 4.0/4.0

Work Experience

Microsoft – Software Developer II (FTE) June 2015

- Develop traditional machine learning and deep learning models to solve business and natural language processing (NLP) problems
- Design, implement, and maintain a question answering engine for technical questions
- Design, implement, and maintain a cloud database sizing recommendation engine
- Design, implement, and test an autonomous driving simulator leveraging the Unreal 4 Engine
- Design tutorials to demonstrate the usage of Azure technologies for training deep learning models for autonomous driving

NASA Glenn Research Center– Software Developer May-Aug 2014

- Designed, implemented, and tested preprocessor code integrating the Pointwise mesh generation software and the Glenn-HT Multiblock computational fluid dynamic solver
- Evaluated and augmented the Glenn-HT graphical user interface software, adding grid visualization capabilities.
- Simulated experimental shroud designs for the SEA multi-wire probe using the Glenn-HT solver

Argonne National Laboratory – Software Engineer May-Aug 2013

- Designed, implemented, and tested user interface software for the Digital Alpha Beta Radioactive Assay System (DABRAS-II) low level radiation counting system
- Evaluate and test existing hardware interface system
- Develop a quality assurance testing protocol, and deploy initial units to the field for beta testing

Robotic Automation Researcher Dec 2011 – June 2015

- Design and implement an autonomous control system for a robotic lunar excavator
- Design, implement, and test computer vision algorithms for robotic localization in harsh environments
- Model and fabricate robotic parts

Technical Skills

Programming Languages

- Expert: C, C++, C#, Python, T-SQL, U-SQL
- Proficient: Java, JavaScript

Software Packages

- Python: Keras, Tensorflow, CNTK, Scikit-Learn, Numpy, Scipy, Pandas, Matplotlib, Django, NLTK
- C/C++: ROS, OpenCV, PCL, Boost, Unreal Engine, Eigen

Academic Publications:

- Distributed Deep Reinforcement Learning on the Cloud for Autonomous Driving
  - Authors: M. Spryn, A. Sharma, D. Parkar, M. Shrimal
  - Presentation: International Conference on Software Engineering, 2018
- The Development of Synergistic Optoelectronics Based on Zinc Oxide Semiconducting Nanowires
  - Authors: A. Gupta and M. Spryn
  - Presentation: International Microelectronics and Packaging Society, 2012
- Design of Nanosensing Platform Based on Zinc Oxide Nanowire Arrays
  - Authors: A. Gupta, M. Spryn, B. Kim
  - Conference Publication: International Symposium on Circuits and Systems, 2012
- Packaging and Sensing Platform using Opto-electronic Zinc Oxide Nano-Heterostructure Integration
  - Authors: A. Gupta, M. Spryn, B. Kim
  - Conference Publication: Electronic Components and Technology Conference, 2013