Andrew S. Morgan

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Education

Yale University – New Haven, CT (Started Aug, 2017)

- Pursuing **Doctor of Philosophy degree in Robotics (Department of Mechanical Engineering and Materials Science)**

Youngstown State University – Youngstown, OH (Completed May, 2017)

- Received **Dual Honors Diplomas: Bachelors of Computer Engineering; Bachelors of Computer Science**
- Cumulative GPA: **3.98/4.0**

Work Experience

3D Printing Outreach Instructor for Youngstown Business Incubator. Youngstown, OH (08/16 – 07/17; variable summer weeks)

- Develop a curriculum for High School students to learn the business side of 3D Printing
- Inform students of the capabilities of a rapidly growing technology - additive manufacturing
- **RELATED SKILLS:** 3D Printing, Teaching, Plan Management, Public Speaking

Auburn REU on SMART UAVs. Auburn University. Auburn, AL (05/16 – 07/16; summer semester)

- Develop new technologies associated with "see and avoid" strategies and recovery systems
- Constructed two publishable papers and presentations for later representation of my work
- **RELATED SKILLS:** Computer Vision, C++, Embedded Systems, OpenCV, Academic Writing, Project Coordination

Honors Engineering Teaching Assistant / Engineering Lab Manager. Youngstown, OH (07/14 – 06/16)

- Aid students in the understand of fundamentals learned throughout their coursework
- Develop student mentor relationships with incoming freshman honor students
- **RELATED SKILLS:** Microsoft Products, 3D Printing, Leadership, MATLAB, Solidworks, Project Coordination

Test Engineering Co-operative. ABB Inc. Wickliffe, OH (05/15 – 08/15; summer semester)

- Test ABB Power Systems components and modules for corresponding tasks
- Organize and coordinate co-op fundraising WE CARE charity event
- **RELATED SKILLS:** Microsoft Products, C, C++, Cisco Networking, Communications, Leadership, Arduino

Awards/Honors

- Youngstown State University Scholars Program (full 4-year academic scholarship based on outstanding academic achievement)
- National Science Foundation GRFP Honorable Mention (03/17/2017)
- Tau Beta Pi Graduate Fellow (04/07/2017)
- Barry M. Goldwater Scholar 2016 (03/31/2016)
- Tau Beta Pi Scholar 2016 (06/06/2016)
- Ohio House & Senate Recognition Awards (07/13/2016)
- Pi Mu Epsilon National Math Honor Society (03/15)
- Phi Kappa Phi National Honor Society (03/15)
- Tau Beta Pi National Engineering Honor Society (10/15)

Publications

- Meyers, K., Morgan, A., and Conner, B. "3D Printing in a First-Year Engineering Design Project". American Society for Engineering Education National Conference, New Orleans, 2016.
- Meyers, K., Morgan, A., and Conner, B. "Using 3D Printing to Understand the Design Iteration Process". Global Journal of Engineering Education, Vol. 18, Issue 1, 2016
- Morgan, A., Sharif, B., and Crosby, M. "Understanding a Novice Programmer's Progression of Reading and Summarizing Source Code". Koli Workshop 2014. Koli, Finland. 2014.
- Morgan, A., Jones, Z., Chapman, R., and Biaz, S. "An Unmanned Aircraft "See and Avoid" Algorithm Development Platform using OpenGL and OpenCV." Journal of Computing Sciences and College, Vol 33, No 2, 2017.

In Review:

- Calli, B., Srinivasan, K., Morgan, A., and Dollar, A. "Learning Modes of Within-hand Manipulation." IEEE International Conference on Robotics and Automation (ICRA) 2018.
- Spiers, A., Morgan, A., Srinivasan, K., Calli, B., and Dollar, A. "Using Variable-Friction Finger Surfaces and Proprioceptive Sensing to Classify Objects during Robotic Within-Hand Manipulation." IEEE Haptics Symposium 2018.
- Morgan, A., and Chapman, R. "Ballistic Parachute Recovery System for Unmanned Aerial Vehicles (UAVs)". Auburn Research Experience for Undergraduates on SMART UAVs 2016. Study Coordinated with the Department of Computer Science and Software Engineering. Auburn, AL. Accepted for publication in Make Magazine.

Patent:

One Year (Provisional) Patent completed in April 2015 for device intended for utilization in the medical industry. Further iterations are in progress for hopes of filing 20-year patent upon completion.

For additional information, please visit my website: http://asmorgan.people.ysu.edu