(954) 549-4811
Lucas.pasqualin@knights.ucf.edu

LUCAS PASQUALIN – CURRICULUM VITAE

SKILLS & ABILITIES

PROGRAMMING LANGUAGES

- Proficient in C++
- Experienced in C, Python, Java, and XML.

SOFTWARE LIBRARIES AND DEVELOPMENT TOOLS

- Experienced in Qt5, OpenCv, Android SDK and NDK, TinyXML2, Vlc, ROS, and Cmake.

OPERATING SYSTEMS

- Proficient with Windows, and Ubuntu Linux.

EXPERIENCE

UNDERGRADUATE RESEARCH ASSISTANT, PRODIGY LAB AT THE INSTITUTE FOR SIMULATION AND TRAINING

June 2014 – Present

- Worked with graduate students and wrote scripts in Java to extract meaningful data from physiological experiments.
- Updated JAUS++ library to utilize new C++11 standards.
- Updated build systems using CMake to dynamically link against ROS libraries.
- Augmented the functionality of a video server/client program intended to be used in robotic systems and in custom applications. These modifications include:
    - The ability to share video frames over shared memory.
    - The ability to estimate timestamp information from when the video frame was originally encoded, regardless of the source.
    - A graphical front end for generating Camera Lens Calibration and Homography Calibrations using OpenCv
    - The ability to stream and subscribe to a ROS topic.
    - The ability to estimate timestamp information from when the video frame was originally encoded, regardless of the source.
- In charge of rewriting the software for the SCVBOT (A stem geared robot) to include the following capabilities:
    - Operates a four-wheel differential drive complete with linear and rotational PID.
    - Implements ROS and the Navigation stack to accept simple navigation goals with object avoidance.

TIER I SUPPORT, HRSOFT

May 2014 – June 2014

- Communicated with customers to access complaints and allow for easy integration of HRSoft software.

- Maintained continued functionality on a wide range of systems, by fixing errors when they occurred or escalating errors to the developmental team.

UNDERGRADUATE RESEARCH ASSISTANT, UCF COMPUTER VISION LAB

April 2013 – Present (Contractor)

- Wrote Android App which recognizes facial expressions. The application was demoed at the 2013 CVPR conference in Ohio, Columbia.
- Developed Python code implementing the Pytube library for the download of videos for youtube. Videos were used in the Thumos data set.
- Wrote software that attempts to 'color in' black and white photos using the HOGgles algorithm developed by MIT.
    -

VICE PRESIDENT, SOFTWARE LEAD, UCF ROBOTICS CLUB

Aug 2013 – Present

- Developed and deployed code on an Android platform which performed basic shape recognition.
- Facilitated communication between mechanical, electrical, and software teams.
- Brought new members up to speed on various Robotic/Programming concepts.
- Aided in the development of robotic missions for the AUVSI RoboBoat 2014 competition. Missions involved a variety of vision and navigation based tasks. Placed third.

STYLUS BOARD OF EDITORS, STUDENT EDITOR

September 2013

- Judged student submission to stylus, and recommended students for publication.
- Made edits and recommendations on content of submissions.

EDUCATION AND RECOGNITIONS.

UNIVERSITY OF CENTRAL FLORIDA – COMPUTER ENGINEERING B.P.S.E

- Current GPA – 3.39

PUBLICATIONS AND RECOGNITIONS

- Honorable Mention for John C. Hitt Award for Excellence in Writing.
- Pasqualin, Lucas A., "Don't Panic: A Hitchhikers Guide to my Literacy" Stylus Journal for Undergraduate Writing. 4.2 Web.

REFERENCES

OLIVER NINA

PhD Student at the UCF Computer Vision Lab

olivernina@gmail.com

DR. DANIEL BARBER

Director of Prodigy Lab at IST

dbarber@ist.ucf.edu