John Buglione

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EXECUTIVE SUMMARY

- Software engineering generalist with a focus on machine learning and computer vision
- Utilized cutting edge imaging technology, computer vision, and machine learning techniques to design an automated process for estimating crop yield by analyzing image data.
- Results-Oriented Leader: Led a team of undergraduate researchers in designing, constructing, and testing a field deployable unmanned aerial vehicle for use in spatial and temporal atmospheric gas measurement and imaging.

EDUCATION

University of Pennsylvania, Philadelphia, Pennsylvania, USA

- Master of Engineering (M.E.) in Robotics - Software — Sep 2014 – Jun 2016
  - Thesis: Use of Compton Backscatter X-Ray Imaging in Agriculture
  - Research areas: Data Analysis, Algorithms, Image Processing, Robotics, Computer Vision, Precision Agriculture.

Villanova University, Villanova, Pennsylvania, USA

- Bachelor of Science (B.S.) in Electrical Engineering — Sep 2010 – May 2014
  - Minors in Computer Science and Japanese
  - Graduated Cum Laude
  - Villanova Endowed Scholar
  - Capstone Project: Software Based Automated Satellite Tracker

U.S. Department of State, Himeji, Hyogo Prefecture, Japan

- Critical Language Scholarship — Jun 2014 – Aug 2014
  - Created ties between Japanese and American nationals through the study of the Japanese language, meetings with industry professionals, and various cultural enrichment activities.

SKILLS SUMMARY

- C, C#, Java, Python, Ruby, and MATLAB
- RESTful Web Design Skills
- Embedded Hardware Design
- Proficient in Linux/Unix Systems
- Machine Learning and Data Analytics
- Signal Processing and Computer Vision
- Database Software (Mondo DB, SQL)
- Computer Aided Design

WORK HISTORY

CHI Systems, Software Engineer

- Plymouth Meeting, PA — 2017
  - Assisted in development of a robotic computer human interaction data analysis and decision making framework developed for NASA for research use aboard the International Space Station.
  - Participated in various R&D activities including the proposal of a system to derive actionable data regarding vector-borne diseases from remote sensing data sets.

MIRTHE, Research Intern

- Zondlo Lab, Princeton University, Princeton NJ — 2013
  - Led an undergraduate team in building an autonomous aerial vehicle sensor platform. The sensor platform is to spatially and temporally survey methane emissions at natural gas hydraulic fracturing sites.
- Zondlo Lab, Princeton University, Princeton NJ — 2012
  - Improved an automated gas sensor system using spatial and temporal measurements and data analytics.

Alltest Instruments, Instrument Calibration and Service Technician

- Farmingdale, NJ — 2011
  - Analyzed, diagnosed, and repaired electronic test equipment.

Delaire USA, Technical Intern

- Manasquan, NJ — 2010
  - Worked as a technical assistant creating custom RF and fiber optic cables.