TUDOR GEORGE DONCA

(216) 258-9066 • tudordonca.com • tgdonca@gmail.com • linkedin.com/in/tgdonca

EDUCATION

University of California, Los Angeles

B.S. Computer Science and Engineering   Expected June 2020
- GPA: 3.3
- Relevant Coursework: Artificial Intelligence, Probability and Statistics, Linear Algebra, Algorithm Design and Analysis, Operating Systems, Networking, Computer Systems Architecture

RESEARCH EXPERIENCE

Center for Vision, Cognition, Learning, and Autonomy, UCLA

Research Assistant, Robotics   July 2018 - Present
- Completely overhaul Baxter robot control system in C++ using ROS and MoveIt frameworks.
- Design and implement system with a focus on code readability and object oriented design principles to allow easy functional extensibility for all future robotics research projects.
- Develop human-robot interface on Microsoft HoloLens to provide explainability of the robot's action decisions and mental model.

TECHNICAL PROJECTS

Agile Industrial Robotics Competition, NIST

Industrial Robot Control System   March - August 2018
- Developed control system for KUKA IIWA14 robot for Agile Robotics for Industrial Automation Competition (ARIAC).
- Implemented actions for bin picking and placing in an order fulfillment environment.
- Detailed write-up and code at tudordonca.com/ariac

Computer Science Department, UCLA

Neuroimaging Data Processing   March - June 2017
- Designed and implemented a data preprocessing pipeline for a stroke-induced brain lesion prediction model.
- Performed brain lesion segmentation using MATLAB and SPM12 to coregister Digital Subtraction Angiography data to MRI imaging.

PROFESSIONAL EXPERIENCE

UCLA Information Security Office

Assistant Information Security Analyst   May - July 2016
- Promptly resolved malware notifications from over 45,000 student and staff accounts over all university department networks.
- Assisted in performing and analyzing campus-wide Qualys vulnerability scans.

SKILLS/CERTIFICATIONS

Robot Simulation and Control: C++, Python, ROS, MoveIt, Gazebo, Linux
Human-Robot Interaction: C#, Microsoft HoloLens, Unity3D, Visual Studio
Data Processing and Visualization: Matlab, Python, Matplotlib, SPM12
Information Security: CompTIA Security+