

ROLLEN D'SOUZA

rs2dsouz@edu.uwaterloo.ca • github.com/rollends

Publications

V. Joukov, R. D'Souza and D. Kulić, *Human pose estimation from imperfect sensor data via the Extended Kalman Filter*, International Symposium on Experimental Robotics, 2016. [Presented, In Press]

Academic Work Experience

Teaching Assistant 2016/09—2016/12

Assisted students in the first year SE101 course. Managed a weekly 2-hour lab section and marked weekly quiz submissions as well as a final course project. Engaged with students through Piazza and office hours.

Undergraduate Research Assistant 2016/05—2016/08

Supervised by Prof. Dana Kulić.

Undergraduate Research Assistant 2015/01—2015/04

Implemented real-time inverse kinematics algorithm for human motion capture data. Supervised by Prof. Dana Kulić.

Industry Work Experience

Medical Software Developer Co-op 2015/09—2015/12

Sunnybrook Health Sciences Centre

C++ Linux and Windows Application development contributing to the Vurtigo image-guidance visualization software for cardiac interventions.

Software Development Engineer Co-op 2014/05—2014/08

The Coalition Studio, Microsoft

Created tools to support design and development workows in video games. Wrote rendering shaders and created a background loader for the Unreal Game Engine. Contributed to *Gears of War 3: Ultimate Edition* and *Gears of War 4*.

Software Development Engineer Co-op 2013/09—2013/12

The Coalition Studio (formerly known as Black Tusk), Microsoft

Developed tools to report on runtime video game performance.

Multimedia Software Developer 2012/05—2012/08

University of Waterloo

Developed video conferencing software with an editable whiteboard using a Flash front-end and a Java EE backend.

Honours and Awards

- 2016 NSERC Undergraduate Student Research Assistantship (USRA)
- 2016 General Motors (GM) Innovation Award
- 2015 NSERC Undergraduate Student Research Assistantship (USRA)
- 2014 International Genetically Engineered Machine (iGEM) Competition — Best Model
- 2011 University of Waterloo President's Scholarship

Education

Candidate for Bachelor of Software Engineering
Honours Software Engineering

Joint Honours Applied Mathematics
University of Waterloo