

Dylan Wallace
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EDUCATION

University of Nevada, Las Vegas, Las Vegas, NV
Bachelor of Science in Electrical Engineering, May 2020
Minor in Computer Science, Minor in Mathematics
GPA: 3.88

HONORS AND AWARDS

University Honors Program
Valedictorian Scholarship
Elks Foundation Most Valuable Student Scholarship
IRES Fellowship
College of Engineering Dean's List, 2015-2018
Fall 2016 Junior Design Winner

GeekPwn 2018 Robot Agent Challenge World Champion

ORGANIZATIONS

IEEE UNLV Vice President
Engineering Student Ambassador
Tau Beta Pi Member

PRESENTATIONS & WORKSHOPS

Honors College Panel – UNLV Research Week, October 2018

“Augmenting a miniature humanoid platform with a low-cost networked computer vision framework” – **IEEE Computing and Communication Workshop and Conference**, Paper, Las Vegas, NV, USA, January 2018

“Towards tasking humanoids for lift-and-carry non-rigid material” - **Ubiquitous Robotics and Ambient Intelligence Conference**, Poster, Jeju Island, South Korea, July 2017

Smart Home Workshop – IEEE Winter School on Consumer Robotics, January 2017

PUBLICATIONS

D. Lofaro, **D. Wallace**, V. Edwards, D. Wicke, and D. Sofge, "A probabilistic approach for real-time control over the cloud," in *Journal of Autonomous Robots (AuRo)*, vol. 43, no. 3, In Review

D. Wallace, B. Hament, J. C. Vaz and P. Oh, "Augmenting a miniature humanoid platform with a low-cost networked computer vision framework," *2018 IEEE 8th Annual Computing and Communication Workshop and Conference (CCWC)*, Las Vegas, NV, 2018, pp. 564-569.

doi: 10.1109/CCWC.2018.8301766

Y. Tanaka, H. Lee, **D. Wallace**, Y. Jun, P. Oh and M. Inaba, "Toward deep space humanoid robotics inspired by the NASA Space Robotics Challenge," *2017 14th International Conference on Ubiquitous Robots and Ambient Intelligence (URAI)*, Jeju, 2017, pp. 14-19.

doi: 10.1109/URAI.2017.7992877

RESEARCH

University of Nevada, Las Vegas, Drones and Autonomous Systems Lab, Jan 2016 – Present
Undergraduate Researcher

- Developed framework for networked computer vision for low-cost humanoid robotics
- Researched communication delay for deep space implementation of humanoid robots
- Researched methods for localization and navigation of mobile and humanoid robots

Naval Research Lab, Washington, D.C., Summer 2018

Research Intern

- Researched the effects of latency on cloud-based walking algorithms
- Researched casual social interactions between humanoid robots and humans

KAIST, HUBO Lab, Daejeon, South Korea, Summer 2017

Research Intern

- Assisted PhD students with humanoid robotic research experiments
- Created algorithm for segmenting candidate planes for real-time footstep planning
- Worked with international researchers and graduate students to develop a real-time footstep planning algorithm for DRC-HUBO

EMPLOYMENT HISTORY

University of Nevada, Las Vegas, Drones and Autonomous Systems Lab, Jan 2016 – Present

Webmaster and Systems Administrator

- Managed the laboratory's tutorial and research website
- Managed the laboratory's server, file archives, and wireless networks
- Installed and maintained computer systems and networks

VIRT Inc., Mar 2017 – Jan 2018

Robotics Software Developer

- Developed simulation framework for the company's robotics platform
- Created person tracking, mapping, and navigation algorithms for the robot
- Setup OS, hardware, and software for the robotics platform

High Impact Sign and Design, Las Vegas, NV, Summer 2013 & 2015

CNC Operator and Technician

- Organized design files
- Machined signs & lettering