

Jerryll Noorden

Professional Summary & Skills

- 4+ years team lead and project management experience in fast phased multi-disciplined environment
- 9+ years Mechanical Engineering, Robotics engineer/scientist experience in R&D environment.
- **Project Management Skills:** Board-Level Reporting, Technical Writing, Analytical Problem Solving, Scheduling, Planning & Work, Assignment, Lecturing, Presenting Technical Papers.
- **Mechanical & Technical Skills:** SolidWorks, FEA, Mechanical Design, Structural Analysis, Materials
- **Languages:** English, Spanish, Dutch, Suriname, Papiamentu

Professional Accomplishments

Senior Mechanical Engineer (NX), ASML, Wilton CT, Aug. 2015 – 2016

- Developed a system to reduce cooling fluid leak risk by 50%.
- Developed machinery with 13% more accuracy in the nm scale than the current leading EUV machines making this the world's most advanced lithography machine.



Lead Mechanical Engineer, Istituto Italiano di Tecnologia (IIT), Genova Italy, May, 2014 – Aug. 2015

- Managed a team of mechanical, design, control and electrical engineers, to design and build a disaster response humanoid, under budget and under deadline.
- Outsourced work and established relationships with crucial clients for a total savings of over \$40,000 dollars in machined parts over a period of 9 months.
- Managed projects, identified bottle necks, devised and implemented eliminating delays that ultimately resulted in on-time completion of an initially 15 month delayed project resulting in continued funding for future projects.



Lead Mechanical Engineer, NASA, Houston TX, Dec. 2012 – Nov 2013

- Procured over \$1,000,000 dollars in funding as a direct result of performance of successful projects
- Managed a team of multi-disciplined engineers as the principal mechanical lead to successfully bring complex robotic systems from concept to final product
- Served as the principal Mechanical Lead on 2 concurring projects with strict requirements and deadlines to design build and test crucial life support equipment, that is 80 % more efficient and over 90 % lighter than current systems on the International Space Station.
- Developed 2 successful robotic systems from concept to final product on time and within budget.



Project & Mechanical Lead Engineer, IHMC, Pensacola FL, Dec. 2007 – Nov 2013

- Managed and lead the entire IHMC line of exoskeleton projects.
- Secured over \$2,000,000 dollars of government funding based on results driven projects.
- Managed lead and organized a team of crossed disciplined engineers.
- Interviewed, hired, trained and inspired new engineers to become highly capable team members of state of the art robotics systems.
- Organized events and sponsored youth events to inspire the young community to get involved with technology and science.
- Developed advanced robotic systems that enabled 2 paraplegic people to walk again after years of wheeled chair confinement.

Project Accomplishments



IIT - Istituto Italiano di Tecnologia, Genova, Italy DARPA Robotics Challenge (DRC).

- **WALKMAN** – A Disaster Response Robot to operate in a fully dexterous human designed environment performing crucial high risk task including saving human lives. For more info, please click [here](#).
 - ❖ [WALKMAN Video](#). (“[Ctrl]+ Click” to watch videos)



NASA - National Aeronautics and Space Administration –Houston TX

- **X1: A Ten Degree-of-Freedom (DOF) Robotic Exoskeleton** - Countermeasures studies, experiments and evaluation at the Biomedical Research and Environmental Sciences Division (SK) of NASA’s Human Health and Performance Directorate.
 - ❖ [Video 1: X1 - Concept Video](#).
 - ❖ [Video 2: X1 Overview Video](#).
- **Paralleled Dual Series Elastic Actuator Dynamometry Ankle** - A powered ankle joints for dynamometry measurements and exercise device extension for the X1 Exoskeleton



IHMC - Institute for Human and Machine Cognition, Pensacola FL

- **Mina** - A Six Degree-of-Freedom (DOF) Robotic Exoskeleton: - A robotic suit for mobility assist, rehabilitation, and strength augmentation.
 - ❖ [Video Mina1: Male participant](#)
 - ❖ [Video Mina 2: Female participant](#)
 - ❖ [Dancing in Exo \(DOF Demo\)](#)
 - ❖ [Exo Walking Without User](#)
 - ❖ [Record & Playback Gait](#)
- **Fast Runner** - A bipedal fast running robot that is energy efficient and inherently stable.

Education.

Florida Institute of Technology, Melbourne FL, USA.

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| ● M.S., B.S. Mechanical Engineering | (2009) | ● B.S. Applied Mathematics | (2002) |
| ● M.S. Engineering Management | (2004) | ● B.S. Aerospace Engineering | (1999) |
| ● B.S. Mechanical Engineering | (2003) | | |

Patents

Jerryll H. Noorden, Peter D. Neuhaus, Nic Payton, Nic Radford, Travis Craig. “ BIPEDAL EXOSKELETON AND METHODS OF USE”. U.S. Patent 61/709,489 , filed October 4, 2012

Publications

- Peter D. Neuhaus, Jerryll H. Noorden, Travis Craig, Tecolote Torres, Justin Kirchbaum, Jerry E. Pratt. *Evaluation of a Robotic Orthosis for Paraplegics*. ICORR 2011.
- Peter D. Neuhaus, Jerryll H. Noorden, Hian Kai Kwa, Mathew Missel, Travis Craig, Jerry E. Pratt. *Development of a Rotary Series Elastic Actuator for a Robotic Exoskeleton Application*. IEEE ICRA 2009.
- Peter D. Neuhaus, Jerryll H. Noorden, Hian Kai Kwa, Mathew Missel, Travis Craig, Jerry E. Pratt. *Development of the IHMC Mobility Assist Exoskeleton*. IEEE ICRA 2009.