

ROBOTICS & ARTIFICIAL INTELLIGENCE (AI)



KEY SKILLS

- Application
- Communication
- Creativity
- Critical Thinking
- Mathematics
- Multitasking & Interdisciplinary
- Problem Solving
- Technical
- Theoretical Thinking



CONCENTRATIONS/SPECIALIZATIONS

- Human-Robot Interaction
 - Bionics & Biomimetics
 - Social Intelligence & Artificial Emotions
 - Speech Recognition
- Industrial/Construction
- Logistics & Automation
- Machine Learning
- Machine Perception/Computer Vision
- Medicine & Health
- Military
- Navigation
- Open Source
- Specialized Environments
 - Agricultural
 - Ocean/Underwater
 - Space



SAMPLE DEGREES

- Computer Engineering (BS, MS, PhD)
- Computer Engineering + Electrical Engineering (BS)
- Computer Science (BA, BS, BS/MS, MS, PhD)
- Electrical Engineering (BS, MS, PhD)
- Mechanical Engineering (BS, BS/MS, MS, PhD)



SAMPLE OCCUPATIONS

- Accounts Manager
- Draftsman/CAD Technician
- Electro-mechanical Technician
- Information Research Scientist
- Investigation Scientist
- Project Manager
- Repair Technician
- Robot/Drone Operator
- Robot Programmer
- Robotic RPA Architect
- Robotic User Interface Developer
- Robotics Engineer
- Sales Engineer
- Software Developer



POSSIBLE WORK SETTINGS

- Corporation
- Engineering Firm
- Federal Government/ Government Contractor
- IT Company
- Medical Instrumentation Company
- Nonprofit Organization
- R&D Company/Startup
- Robotics Manufacturing Company
- Think Tank
- University/College



SAMPLE STUDENT ORGS

- GWACM (Computing Machinery)
- Institute of Electrical & Electronics Engineers (IEEE)
- National Society of Black Engineers
- Robotics Team
- Society of Women Engineers
- Tau Beta Pi (Eng. Honor Society)



SAMPLE EMPLOYERS

- Agility Robotics
- ALTA IT Services
- Amazon Robotics
- Artas
- Bechtel Corporation
- Carnegie Mellon University
- Datamatics Global Services, Inc.
- DCS Corp
- DJI
- Ernst & Young
- Fetch Robotics
- Gecko Robotics
- Google Robotics
- GTRI Robotics & Autonomous Systems Division
- HEBI Robotics
- Intuitive Surgical
- Johns Hopkins Applied Physics Lab
- Liquid Robotics
- NASA
- OpenAi
- Open Robotics
- Oregon State University
- PSI Pax, Inc.
- RightHand Robotics
- Robotic Research LLC
- Robots for Humanity
- SAIC
- Soft Robotics
- Southwest Research Institute
- Stryker Corporation
- Toyota Research Institute
- Volt Inc.
- Woods Hole Oceanographic Institution
- Zaniac
- Zipline



PROFESSIONAL ORGS

- Association for the Advancement of Artificial Intelligence (AAAI)
- Association for Unmanned Vehicle Systems International (AUUSI)
- Institute of Electrical & Electronics Engineers (IEEE) Robotics & Automation Society
- Robotic Industries Association

