



Evolution Robotics Employment Opportunity Profile

1055 E. Colorado Bl., #410 • Pasadena • California 91106 • (626) 993-3300

Robotics and Vision Engineer Evolution Robotics Pasadena, California

Position Summary as of August 11, 2009

Title: Robotics and Vision Engineer

Reports to: VP of Research and Development

The Company:

Evolution Robotics, Inc. is a robotics company that is developing break-through technologies that are revolutionizing robotics for the mass market. The recent convergence of low-cost mobile computing, wireless communication, and sensing technologies has not only made the development of mobile robotic products possible, but also economical for mainstream usage. Evolution Robotics develops breakthrough solutions for making machines sense and act autonomously. We partner with consumer electronic companies to augment the capabilities of their products, such as the Sony AIBO(r) dog or the WowWee robotic toys, or create entire new robotic products such as the eVac robotic vacuum cleaner from Sharper Image.

Evolution is a recognized leader in the industry and the academic communities. The company has assembled a world-class management team composed of leading robotics experts and consumer products business leaders to make the company's vision of providing useful robots at affordable prices a reality.

The Evolution Robotics team operates in a highly dynamic and very collaborative environment where the flow of ideas is encouraged from all parts of the team. The team of extremely talented engineers and scientists at Evolution has created a unique and highly stimulating and fun work environment. This team challenges the status quo in technology and pushes the envelope on what may seem impossible.

Evolution Robotics is an operating company of Idealab!, a technology incubator known for having started many successful companies like Overture and CitySearch. We are located in the beautiful and sunny Pasadena, in Southern California. Hosting scientific institutions like the California Institute of Technology and the Jet Propulsion Lab, and national events like the annual Tournament of Roses, the city is considered the main cultural center of the San Gabriel Valley.

Position Purpose:

Design, implement, test, and document robotics and vision algorithms in C/C++ on Linux/Windows and on embedded platforms.

The position responsibilities also include validation and characterization of the products developed at Evolution Robotics including the Evolution Robotics Software Platform (ERSP), embedded solutions for vision and navigation, and robotics components and hardware. The position also entails providing customer support by helping customers solve problems and replying to customers requests via email and phone.

The position involves a substantial portion of “hands-on” work and requires an individual able to work independently with minimal supervision.

Requirements:

- Hands-on experience developing robotics or vision systems.
- Working knowledge of C/C++ and scripting languages.
- Working experience in both Linux and Windows.
- Experience validating complex systems involving hardware, software and mechanical components.
- A solid engineering background with hands-on design and development experience.
- Excellent verbal and written communications skills.
- Ability to work independently, without direct supervision.
- Strong problem solving skills and a fast learner. Strong analytical skills.
- **Minimum Degree** BS in Computer Science, Electrical Engineering, or related field.

Nice to have:

- Ability to build/assemble/modify electronic assemblies or robots into various configurations for test purposes.
- Understanding of and experience with any of the following: behavior-based control, navigation, path-planning, obstacle avoidance, SLAM, fuzzy logic, estimation and control.
- Understanding of and experience with any of the following: object recognition, structure from motion, 3D reconstruction, ego-motion estimation, feature extraction and matching, face recognition.
- Hands-on design and development experience of software and hardware products.
- Experience developing embedded systems.
- Experience in validating consumer or robotics products.
- Familiarity with XML, Perl, Shell scripts
- Experience developing and producing commercial SDKs.

INTERESTED CANDIDATES SHOULD SUBMIT THEIR RESUME AND SALARY HISTORY TO: careers@evolution.com

An Equal Opportunity Employer
© **Evolution Robotics**