



## NEW CAREER OPPORTUNITY

Build your career with Kraken Robotics.  
Make a difference to others.

If innovation drives you, and you want a career that makes a difference to the world, helping humanity overcome the challenges in our oceans – safely, efficiently, and sustainably – then come join us at Kraken Robotics.

[www.krakenrobotics.com](http://www.krakenrobotics.com)

## Senior Systems Engineer

Based at Kraken Robotics Newfoundland, Canada  
Full-Time – Permanent | Job Reference: KRSI-2024-39

Kraken is seeking a Senior Systems Engineer to join our team. The Senior Systems Engineers will be responsible for guiding the “interdisciplinary approach governing the total technical and managerial effort required to transform a set of customer needs, expectations and constraints into a solution and to support that solution throughout its life” (SEBoK). This position is based at our Mount Pearl, Newfoundland, Canada facility.

This role has a primary focus on complex requirements and pre-implementation life-cycle activities such as:

- Analyzing customer requirements and determining a system design plan that will achieve the target capabilities within the constraints of a project
- Identify and document intersystem dependencies within the project system and overall within the Kraken product offering
- Requirements solicitation, derivation, and documentation.
- Development of Verification and Validation Plans
- Control and Oversight of Interface Management
- Facilitating Management of Change with respect to Technical Project Scope
- Customer Technical Interface for project
- Technical Authority for Project Team.

Kraken Systems Engineers rapidly develop expertise in new domains in order to architect, design, deliver, support, and evolve next generation capabilities through the entire product life cycle.

The Kraken Systems Engineers are also responsible for maintaining and improving the Systems Engineering processes used within Kraken.

### ROLES AND RESPONSIBILITIES

- Act as a subject matter expert for your areas of expertise as they relate to the delivery of Kraken's technology capabilities, including areas such as hardware selection and integration, testing and evaluation, robotic perception, engineering process or cybersecurity
- Empathize with end-users and drive solutions that balance their needs with external constraints, restrictions and requirements in a multi-stakeholder environment
- Applying engineering knowledge and a Systems Engineering mindset/approach to large and/or complex projects in the design, development, test, integration, verification, validation and operation of complex, specialized products and/or technologies

- Design, architect, and implement integrated systems, including advanced and sensitive platforms and payloads, that rapidly delivers capability beyond the scope of current systems, with a clear path/roadmap for both architecture and capability evolution over time
- Contribute to the design and development of technology components across Kraken, with the aim of developing components that are re-usable across multiple Kraken product lines
- Contribute to the design, implementation and execution of development processes for the initial delivery and subsequent iteration of complex robotic systems, including full lifecycle testing, monitoring and operation.
- Support system and subsystem design, manufacturing, testing and deployment
- Work as a member of a multi-disciplinary engineering team, including as a mentor for Engineers from differing backgrounds
- Own technology solutions that are deployed to customers, focused on the delivery of value to the end-user
- Collaborating with external and internal stakeholders to
  - Develop system level Concept of Operations/Operational Scenarios
  - Develop System Architecture concepts for solutions.
  - Develop/decompose system level requirements from functional business, customer and other stakeholder requirements and flow down to subsequent subsystems or components.
  - Develop/decompose system level requirements from product development roadmaps, operational needs, and customer and other stakeholder requirements to subsequent subsystems or components
  - Map requirements to verification activities and manage requirements and verification throughout a project's life cycle
- Drive the development/management of:
  - Trade studies, analyses and modeling in support of requirements and system development
  - Sub system Architectures and flow down to component level CIs
  - Requirements management documentation and requirements conflict resolution
  - Interface Control Documentation
  - Other support documentation throughout all phases of a project
- Work with Project Managers and other stakeholders to
  - Support initial project planning/initiation with cost estimation and proposals
  - Create and maintain budgets
  - Create and maintain schedules
  - Identify, assess and mitigate project/design risks
  - Ensure project schedules and budgets are maintained while accomplishing project deliverables
- Work with Discipline Engineers and Operations to
  - Provide technical leadership and review support
  - Support investigations and troubleshooting issues as they arise
  - Coordinate and support integration and testing activities.
  - Develop test plans and procedures for verification and validation activities
- Develop and maintain the necessary the Systems Engineering processes used within Kraken
- Additional Systems Engineering tasking as required.

## QUALIFICATIONS AND EXPERIENCE

- Bachelor's degree in Robotics, Mechatronics, Computer Science, Engineering, a relevant field, or equivalent experience
- ASEP/CSEP/ESEP certification from INCOSE or equivalent an asset
- Approximately 8 years of systems Engineering experience with complex electronic systems or a combination of equivalent education/experience.



- Extensive professional experience working as an Engineer within Hardware and Software development teams with one or more domains and/or technologies of expertise
- Ability to exercise ownership over a complex system, including design, integration, test, and delivery of new capabilities
- Capacity to act as the technical owner for a complex subsystem, including stakeholder engagement, requirements definition, roadmap management, team co-ordination, design, implementation, sustainment and evolution
- Experience with design, development, engineering analysis, integration, and test
- Capacity to work holistically on complex robotic systems across design, implementation, operation and sustainment
- Capacity learn and grow individually, while mentoring junior team members effectively, building team cohesion and capacity
- Highly motivated team player with excellent communication skills, initiative, superior problem-solving skills, the ability to prioritize tasks and willingness to learn and adapt
- Deadline oriented with an ability to manage multiple tasks and projects concurrently
- Excellent time management skills with a focus on meeting deadlines in a high-paced environment.

#### **PREFERRED SKILLS**

- Strong interpersonal skills for collaboration with subject matter experts, colleagues, clients, and users
- Strong skills in standard Microsoft Office, including MS Excel, MS Word, MS PowerPoint
- Experience working with Microsoft MS Project, SharePoint
- Experience with requirements management tooling including DOORs, JAMA, etc. Thorough knowledge of Project Management practices
- Experience transforming and representing data using tools such as Excel, Python/Pandas/Matplotlib
- Experience working within the defense, maritime and/or aerospace domains
- Experience within the product delivery lifecycle including manufacturing, system acceptance, deployment, and sustainment
- Experience developing engineering prototypes of embedded electronic systems
- Experience conducting verification testing and technology demonstrations of marine systems onshore, near-shore, and offshore
- Experience with the design, implementation and support of robotic and/or autonomous systems
- Experience with the specific technologies
  - Sonar in the 10kHz to 400kHz range
  - Autonomous and unmanned vehicles
  - Remotely operated vehicles
  - Energy storage systems
- Desire to grow into a Tech-Lead/Manager role, with responsibility for line management of engineers, in addition to delivery
- Desire to learn and grow into other roles that require experience as a Senior Systems Engineer, such as Principal Systems Engineer and/or Engineering Manager

#### **REGULATORY/SECURITY REQUIREMENTS**

- Must be able to obtain and maintain Canadian Security Clearance and a positive Controlled Goods Assessment. Eligibility to work in Canada either as a Canadian Citizen or Permanent Resident
- Must be eligible for registration with the Controlled Goods Program
- Must be eligible to obtain and maintain a government of Canada “Reliability” status and Level 2 (Secret) security clearance.

**TO APPLY:** Email your latest CV, stating job reference KRSI-2024-39 to: [careers@krakenrobotics.com](mailto:careers@krakenrobotics.com)

## Why come work at Kraken Robotics...



**Want to apply your skills, knowledge and expertise to push the boundaries of underwater intelligence – which help governments defend and make our oceans safe, or ensure critical offshore energy and communications infrastructure is installed and maintained efficiently?** If innovation drives you, and you want a career that makes a difference, helping humanity overcome the challenges in our oceans – safely, efficiently, and sustainably – then come join us at Kraken Robotics.

Kraken Robotics offers a unique career opportunity to work with an internationally recognized leader in ocean technology that is harnessing our world class talent to provide superior subsea solutions for global security, environmental, and scientific challenges. Our highly talented team design and manufacture technology platforms for NATO navies and commercial clients throughout the world and provide acoustic 3D Synthetic Aperture Sonar (SAS) data solutions and imaging in the offshore energy sector with increasing focus on offshore renewables.

Kraken offers an attractive and competitive compensation package designed to reward our team for a job well done. With locations around the world, we support remote working packages and encourage professional and cultural collaborations. Kraken is an equal opportunity employer focused on promoting diversity, equity, and inclusion and we value the diversity of our team that contributes to our company growth and development.

**To find out more about Kraken Robotics, and discover other exciting career opportunities, visit our website, or follow us on social media:**

<https://krakenrobotics.com/about/careers/>

