Kotka Maritime Research Centre (KMRC) specialises in the interdisciplinary approach to maritime traffic, transports, and logistics, considering a wide range of safety-related, environmental, and economic aspects. The common vision of the research community operating under the Centre is to promote the comprehensive sustainability of maritime activities. The research is problem-driven and solution oriented, seeking scientifically validated answers and feasible solutions to topical socio-environmental questions and problems.

Good societal decision-making must be based on scientifically verified information. KMRC's expertise is built upon research carried out at the University of Helsinki, Aalto University, University of Turku, and South-Eastern Finland University of Applied Sciences (XAMK). Kotka Maritime Research Association (KMRA) acts as an umbrella organisation that coordinates, manages, and supports the universities' joint research projects. At the moment, our core researcher network consists of 26 experts.

Kotka Maritime Research Association is seeking a qualified and motivated

Researcher/coder

to automate the translation of expert-elicited causal mental maps to quantitative probabilistic Bayesian Networks (BN) as part of the Academy of Finland-funded project GYROSCOPE. The generated code will be used in a participatory foresight modelling process to help maritime stakeholders better understand their situational picture and identify key risk or resilience factors.

Key tasks are
-   Reviewing and potentially updating the current translation algorithm.
-   Constructing the R or Python code needed to generate conditional probability tables, following the agreed logic.

Qualifications
The ideal applicant will be someone who:
-   can contribute to the algorithm design and independently produce the code (R or Python).
-   is familiar with the concepts of conditional probability distributions and discrete variables.
-   has previous knowledge of Bayesian inference and Bayesian networks.
-   can contribute to the writing of a scientific manuscript concerning the method.

The position is available from 1 September 2023 to 29 February 2024 (6 months), with the possibility of part-time work. Salary for this position will consist of a task-specific component and a personal salary component based on the applicant's qualifications and experience, as per the contract terms.

Application
Submit your application no later than 21 May 2023 by email to Executive Director Anna Kiiski (anna.kiiski@merikotka.fi) with "Gyroscope coder" as the subject line. The application should consist of a short (max 1 page) motivation letter with a statement of the desired salary level, and a CV.