**Workshop 1: Handout 2: *Review of a Modular Snake Robot.***

The design of a USAR (urban search and rescue) modular snake robot by Chavan et. al [1] is a good place to begin researching SAR (search and rescue) robots.

Prepare to write your own literature review (*Section 2: Review of the State of the Art*), by answering these questions about the snake robot with your team. Keep your answers brief

*The paper has been uploaded to LumiNUS>CELC Workshops>Student folder> Workshop 1*

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| 1. | What was the robot designed to do? Describe this briefly in general terms.  *Hint: Read the abstract* |
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| 2. | Describe the snake robot’s system functionalities. *Highlight only points of interest. For your actual literature review, you should focus on how the robot is similar to your Alex.* |
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| 3. | Describe the hardware and software design of the snake robot.  *Focus on its strengths and weaknesses.* |
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| 4. | Describe a function/design feature (of the snake robot) that you would want to try and emulate. |
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**Reference:**

[1] P. Chavan, M. Murugan, E. V. V. Unnikkannan, A. Singh and P. Phadatare, "Modular Snake Robot with Mapping and Navigation: Urban Search and Rescue (USAR) Robot," *2015 International Conference on Computing Communication Control and Automation*, Pune, India, 2015, pp. 537-541, doi: 10.1109/ICCUBEA.2015.110.

**Note**: *Despite some minor language errors, the conference paper is also a useful sample of a design report.*