### Project Title: Shared-memory middleware

**Presentation Date:**

**Presentation Type:** (New, Status, Final)  

**Project Budget:** $15,005

**Center:** Security & Software Engineering Research Center  

**Center Director:** Wayne Zage

**Site (University):** Purdue University Fort Wayne  

**Co-Director:**

**Project PI:** T. Cooklev  

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**Phone:** 260-481-0151

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**Project description:**

Adding shared-memory transport to an open-source middleware implementation such as MICO without impacting TCP transport.

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**Experimental plan:** The operation of MICO has been tested

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**Related work elsewhere and/or in the center:** N/A

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**How this project differs from related work:** Shared-memory middleware solutions do not exist. Other efficient middleware implementations exist, that have different tradeoffs and benefits.

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**Milestones planned for the upcoming year:** A follow-up project is the FPGA implementation of shared-memory middleware

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**Deliverables planned for the upcoming year:** Open-source software, including shared memory transport

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**How the project may be transformative and/or benefit society:** Shared-memory middleware is much more efficient than TCP-based middleware

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**Research areas of expertise needed for project success:** For the next phase we need FPGA expertise

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**Potential member company benefits:** Raytheon

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**Progress to date:** The project is complete. We modified many of the core files of MICO to enable shared memory

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**Project Start Date:** May 2016  

**Estimated Knowledge Transfer Date:** Dec. 2017

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The Executive Summary is used by corporate stakeholders in evaluating the value of their leveraged investment in the center and its projects. It also enables stakeholders to discuss and decide on the projects that provide value to their respective organizations. Ideally, the tool is completed and shared in advance of IAB meetings to help enable rational decision making.