

cs6550

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1 Installation

I decided to use a cross-platform MPI library called klyng written for Javascript and Nodejs. I thought it would be interesting to try writing parallel applications for Nodejs which is not usually used for parallel applications.

Installation of klyng was very straightforward using the Node Package Manager (npm). However, I did have some difficulty choosing the right MPI library for Nodejs as there were a few other alternatives. In the end, klyng had the most support and a more complete interface.

2 Code

```
1 const klyng = require("klyng");
2
3 function main() {
4   let size = klyng.size();
5   let rank = klyng.rank();
6
7   klyng.send({
8     to: (rank + 1) % size,
9     data: rank,
10    subject: "Rank"
11  });
12
13  let result = klyng.recv({ subject: "Rank" });
14
15  console.log("My Rank:", rank, ", Data Received:", result);
16
17  klyng.end();
18 }
19
20 klyng.init(main);
```