



C++ Reflection to the Rescue?

Recursive/Send Type Trait Checking

• Check members of types are all sendable



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```
template<typename T>
```

```
struct Node
```

```
{
```

```
    Node* next;
```

```
    Node* prev;
```

```
};
```

```
std::shared_ptr<synchronized_value<Node>() ;
```

```
auto node = std::make_shared<Node>();  
safe_threads.emplace_back ([this, node]  
    {  
        memberFunction();  
    });
```









C++ Reflection to the Rescue?


- **Recursive Sync/Send Type Trait Checking**
 - Check members of types are all sendable
 - Check members of lambdas are all sendable

```
template<typename T>
struct Node
{
    Node* next;
    Node* prev;
};

std::shared_ptr<synchronized_value<Node>>();
```



```
auto node = std::make_shared<Node>();
safe_threads.emplace_back ([this, node]
{
    memberFunction();
});
```





Wrapping with Reflection