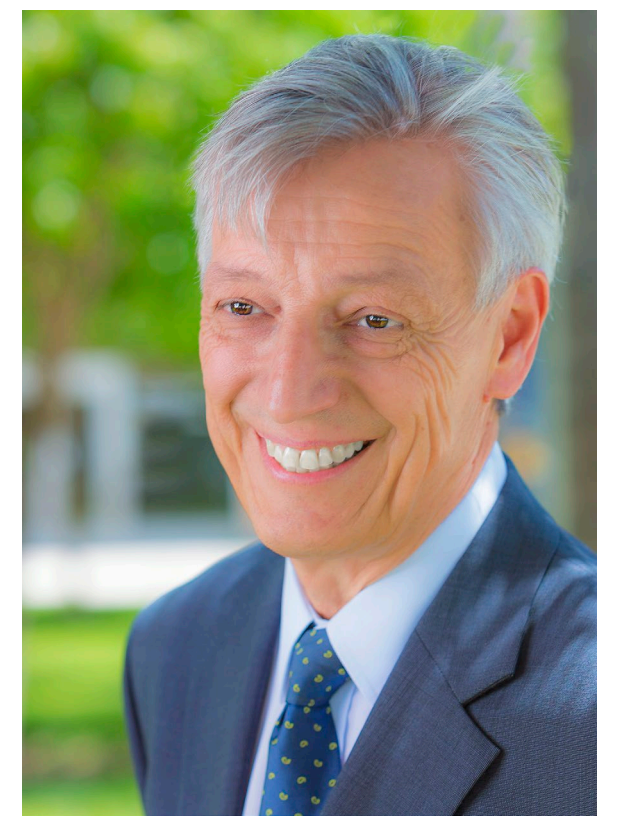


# Securing Information Systems with Flexible Hardware Techniques



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<https://pascal.eng.uci.edu/projects/HardwareSecurity/hardwaresec.html>



## Detect

- Hardware-based malware detector
- Easily Reconfigurable



## Immunize

- Improved immunity against virus
- Ability to recover from attacks

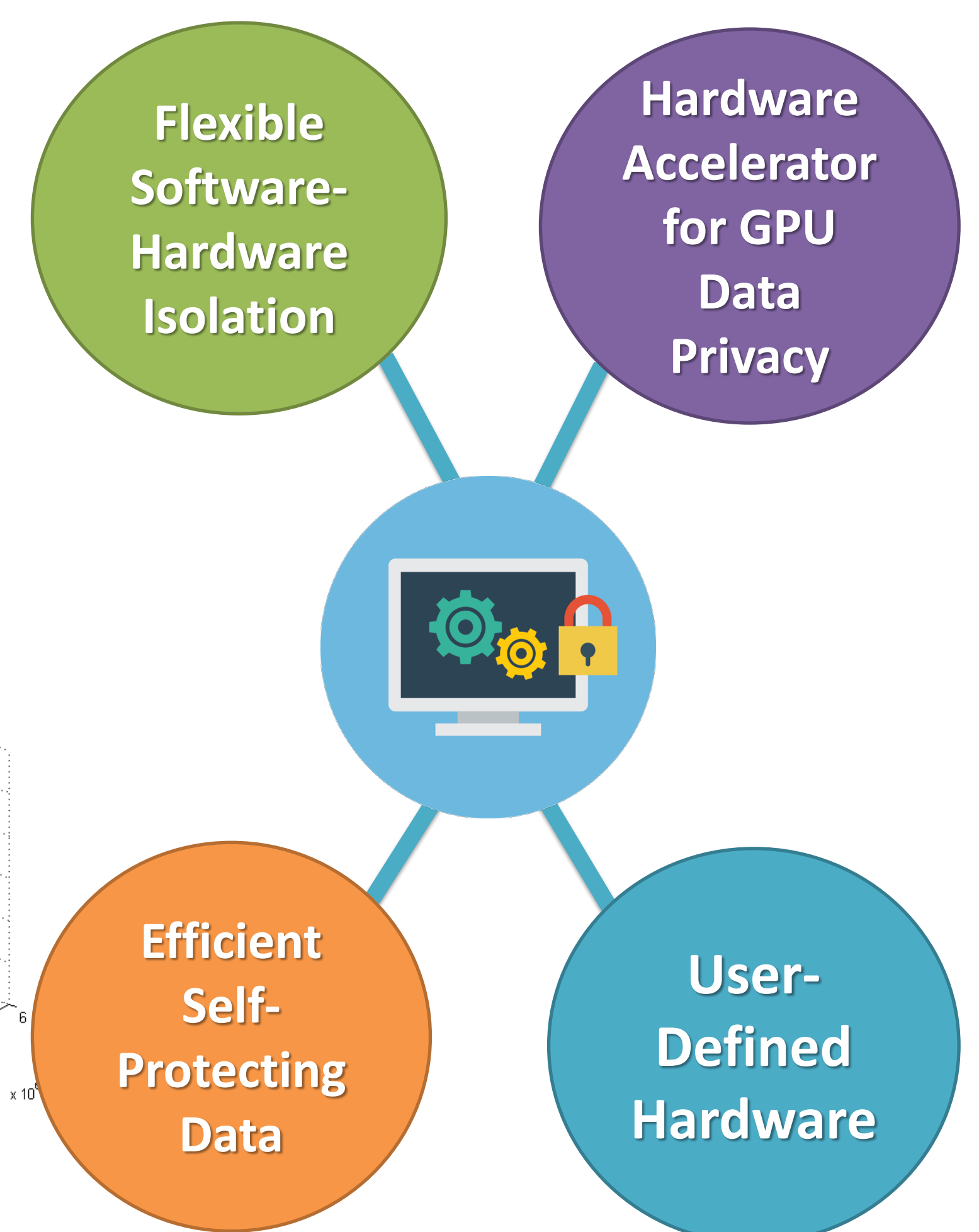
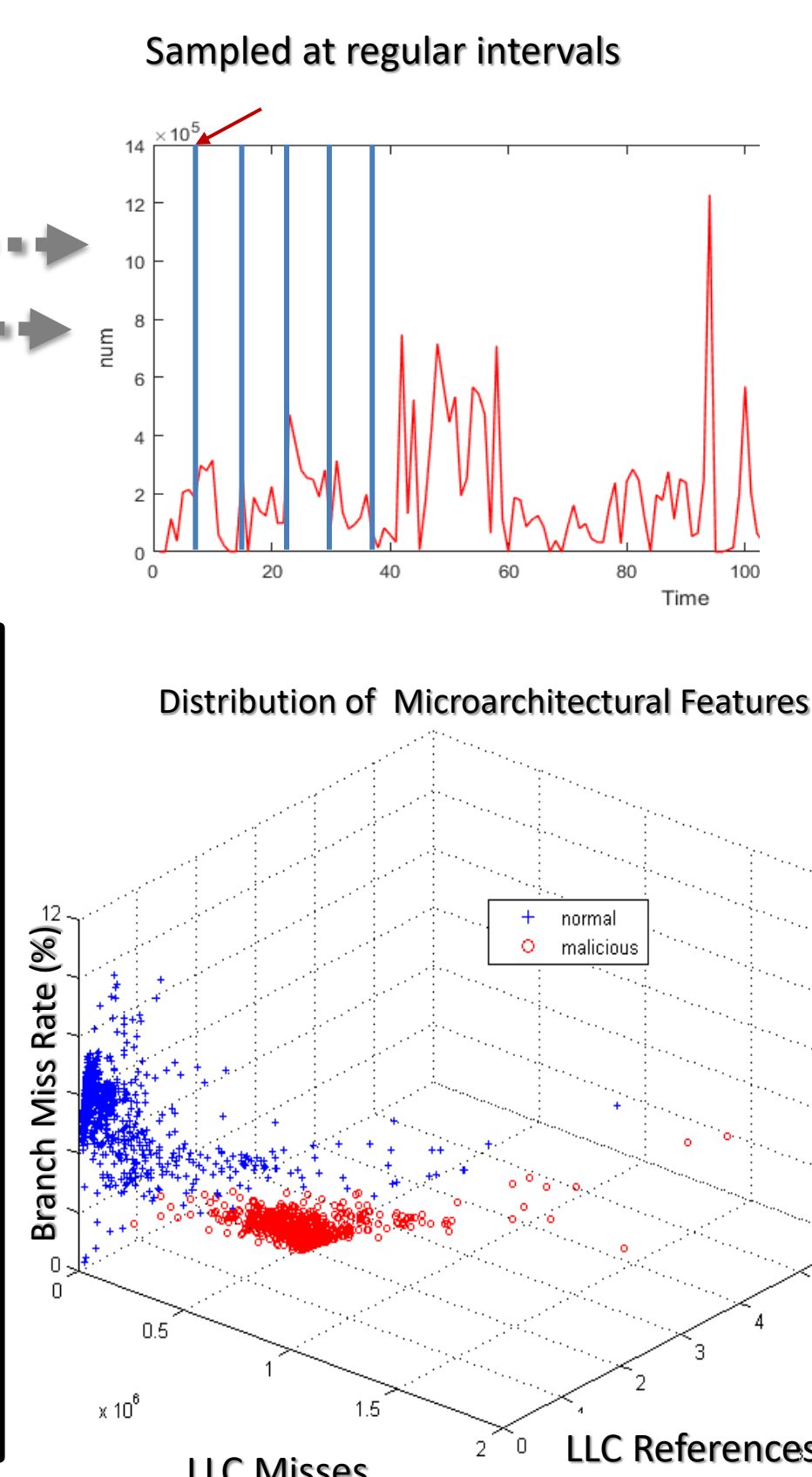
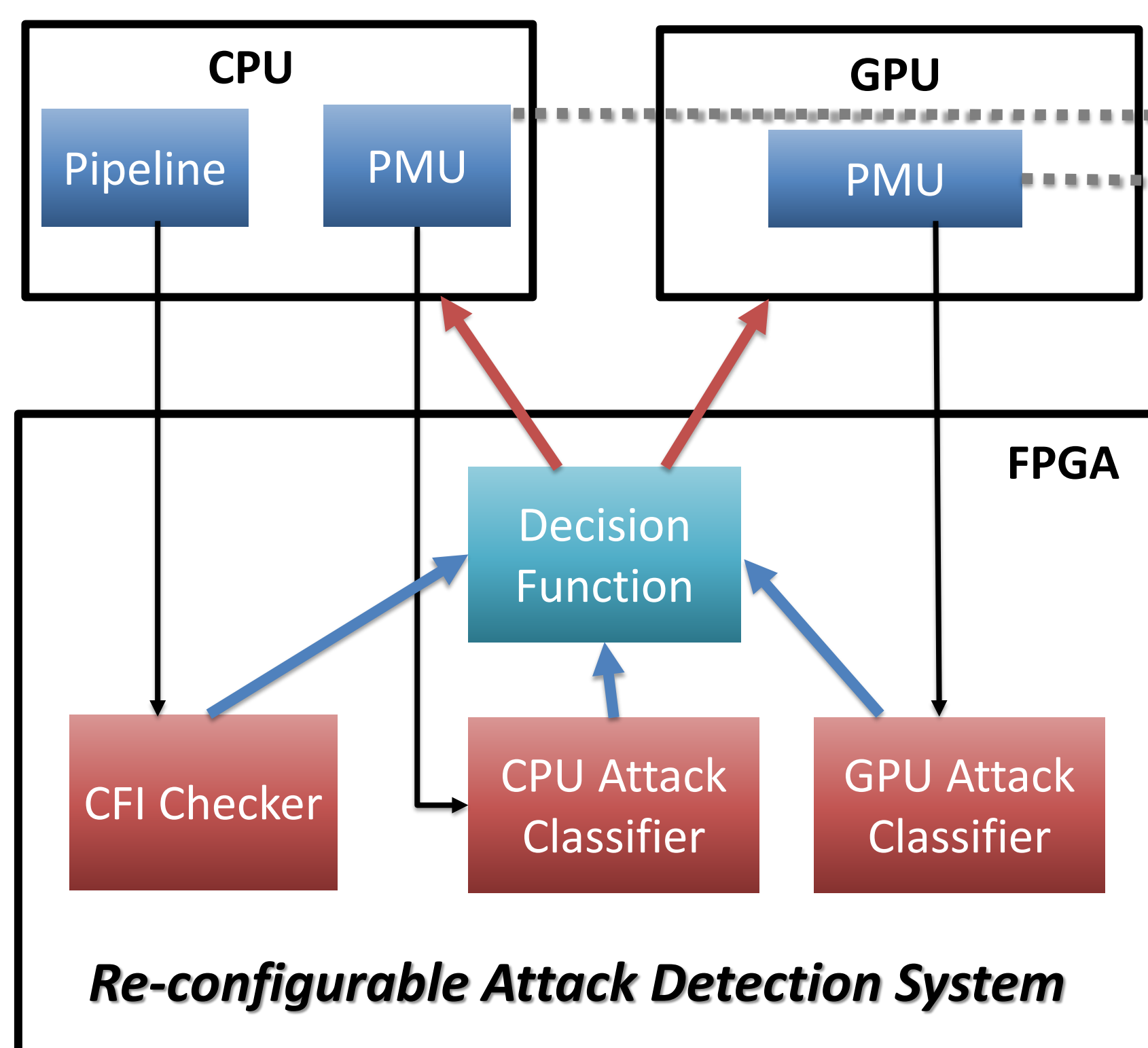
### Challenges:

- Rapidly growing number of cyber attacks
- Ever changing malware landscape
- Novel attacks targeting hardware vulnerabilities

### Scientific Impact:

- Explore a path forward for developing future secure computer systems
- Improve the research community's understanding of hardware security

### Solution:



### Broader Impact on Society:

- Bring together researchers from security, computer architecture and machine learning
- Increase partnerships between academic researchers and industry
- Improve national security

### Education and Outreach:

- Provide multi-faceted learning experience
- Attract and train minority students in the field
- Engage with pre-university students through IEEE TryEngineering Webinar in CyberSecurity

### Broader Participation:

- Make tools widely available to the research community
- Create project webpage to track the progress of the project and the field worldwide

