Assistant Professor
of Computer Science
simina@purdue.edu

Research

Economics and Computation

- Algorithmic Game Theory
- Computational Fair Division
- Auction Theory
- Dynamic Processes
- Complexity of Market Design
- Learning Theory

Online markets
Cloud computing
Virtual currencies

PURDUE
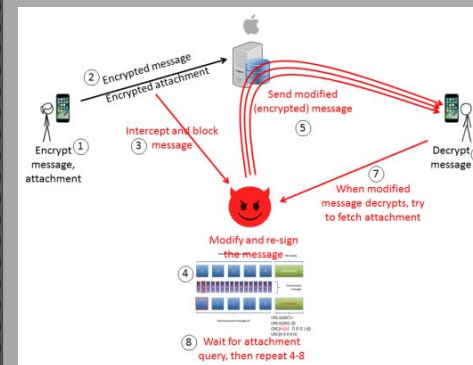SCIENCE

Christina Garman

Assistant Professor
of Computer Science
(January 2018)
clg@purdue.edu

Research Interests
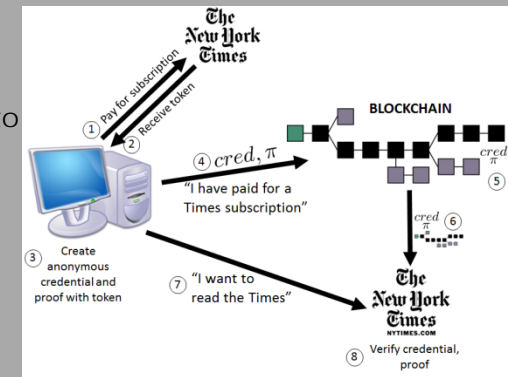
Applied Cryptography, Security

Securing deployed cryptographic systems
- Bridging the gap between cryptographic theory and cryptography in practice
- Evaluating the security of deployed protocols
- Creating tools to help develop secure cryptographic systems
- Building deployable cryptographic systems and protocols

Breaking (and fixing) Apple's iMessage

Using blockchains to enable new applications and increase deployability

Application Domains

Secure Protocol Design
Cryptographic Analysis
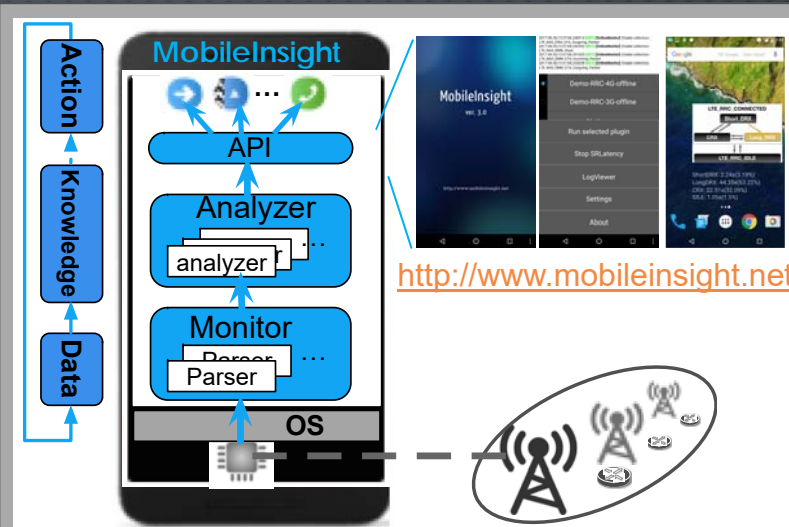Privacy
Cryptographic Implementation
Blockchains

COMPUTER SCIENCE

PURDUE
S C I E N C E

Chunyi Peng

Assistant Professor
of Computer Science
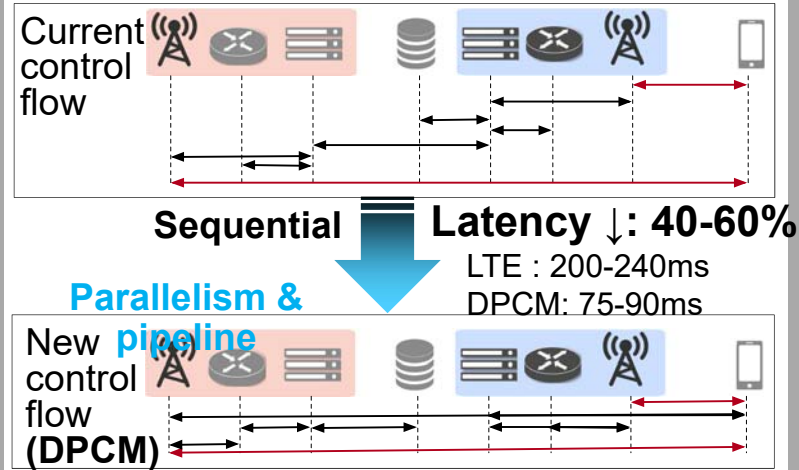chunyi@purdue.edu

Research Interests

Mobile networking, systems and security

- Mobile network intelligence
- Network monitor and analytics
- Network protocol verification
- 5G applications and networks
- Attacks against mobile carriers network
- Privacy in mobile sensing
- Visible light communication and sensing

http://www.mobileinsight.net/

MobileInsight: monitor and analyze "black-box" network operations on smartphones

Sequential **Latency ↓: 40-60%**
LTE : 200-240ms
DPCM: 75-90ms

Parallelism & pipeline

DPCM: Accelerate connectivity establishment and migration via distributed parallel control