Hey, I'm

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Courses

- CS 9549b: Software Architectures
- CS 9864b: Software Engineering for Big Data
  Applications and Analytics
- Coordinate Undergraduate courses:
    - Internship, Capstone, Theses, Inter-university, Mainframe.

- CS 9863b: Empirical Research Methods
- CS 9551a: Requirements Engineering

(dormant)

Learning Objectives – CS9549b (Software Architectures)

- Different types of software architectures
- Quality attributes, tactics, tradeoffs, sensitive points, risks
- Architectural design approaches
- Evaluation of architectures
- Group work – Architectural project on a cloud
- Micro-services and architecture

Learning Objectives – cs9864b
(SE for Big Data Applications and Analytics)

- Domain of Big Data and Data Analytics

- Emerging work on SE and Big Data

- Focus:
  - Mainly: SE for Big Data applications
  - Little: Big Data for SE (a.k.a "Software Analytics")

- Project (2018): Create Big Data application on a cloud using micro-services:
  - Stock market
  - Climate events
  - etc.

Research Themes

- Requirements Engineering (RE)

- RE for Big Data applications

- Cloud infrastructures

- Software/System Architectures

- Complex Defects

- Compliance issues in Development

Example Research Topics

- RE model for Big Data application systems
- Requirements Analytics in systems engineering projects
- Cloud architecture simplicity and performance
- Micro-services: monitoring, extensibility & customisability
- Compliance issues in RE
- Multiple Component Defects (MCDs)
- Faulty component detection

Research Character

- Empirical research methods
- Collaboration with industry

... and not fear the Unknown!