Hey, I'm Nazim Madhavji
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!