Enterprise Architecture and Becoming an Enterprise Architect (22IS8040001)
Dr. Steve Caravajal, Ph.D.

Theme of Class

“Education is not the learning of facts, but the training of the mind to think.” Albert Einstein

Enterprise Architecture

Enterprise Architecture represents the structure and operation of an organization to effectively and efficiently achieve its current and future business objectives. Enterprise Architects (EA), or now more commonly called Digital Architects (DA), are the technologists that design, evangelize and implement the solutions that comprise enterprise architecture. An DA is one of the most important roles in the IT organization, and it requires both breadth and depth across numerous technical skills and domain knowledge. Organizations are currently transitioning from a siloed, IT-managed EA to a business-managed DA role. First and foremost, a DA is a problem solver with in-depth business domain expertise and very good interpersonal communication skills. This course is designed to expose the student to the elements of Enterprise Architecture and to the roles and necessary skills required by the Digital Architect. It is a combination of theory and the practical, but the emphasis and focus will be on the practical. The problems we will address are real-world problems, currently faced by contemporary organizations. This course has been taught to numerous corporations across the world, to help build and evolve their DAs to become more successful. This course will prepare students for what it takes to be successful in one of the more important roles in the IT community.

What will you be required to do?

- Solve problems associated with key Enterprise Architecture patterns (Digital Transformation, Security, Mobility, Big Data, Cloud Services)
- Give presentations to begin to master effective evangelism and persuasion. The student should be prepared to deliver classroom presentations with very little preparation.
- Students will be responsible for creating a new company. They will work in teams of 2 or 3, and this will require both a written proposal and classroom presentation. This project is due at the end of the term.
- Students should bring a laptop to class.
**Reading Requirements**

*Dark Territory: The Secret History of Cyber War*, by Fred Kaplan.
*Originals: How Non-Conformists Move the World* by Adam Grant.

**Course Plan**

Week 1 – What is Enterprise Architecture and the role of the Enterprise Architect

Week 2 - Digital Transformation of the Enterprise

Week 3 – The Role of Cloud Services and a Mobile First World

Week 4 - Security and Cybersecurity

Week 5 – The Impact of Digital Currency

Week 6 – Intelligent Apps, Virtual Reality and Internet of Things

Week 7 – Artificial Intelligence, Machine Learning and Deep Learning

**Grading**

Students will be evaluated weekly based on their classroom participation, classroom presentations, their mastery of the classroom and assigned reading material and their final project which is the creation of a new company. Students will have projects where they work in teams and those where they will work alone.