Abstract: In recent years we have seen an explosion in the proliferation of, and access to, mobile computing platforms. Today, we carry in our pockets devices that are an order of magnitude more powerful than many desktop computers of a few years ago, and many orders of magnitude more powerful than the computers that landed the first men on the moon. This, coupled with a proliferation of sensors, interconnectivity options and cloud services opens up a world of possibilities for a new revolution in computing.

Leading the way in charting this new frontier are mobile application developers. Through their exploitation of mobile computing resources, they are creating the next generation of services and experiences that impact the way we interact with computers and each other.

As more services transition into the mobile realm and users begin to expect this modality, new students to software engineering must be aware and prepared for this reality. The materials and methods used to teach future practitioners must meet the requirements of this new paradigm.

In this talk I will present a synopsis of my work in the mobile application development space, and show how it, along with my experiences as a student, a teacher, mentor, and researcher, fully prepare future students to aid in developing competent and socially relevant software engineers that are ready to tackle the challenges of the mobile revolution. I will present my ideas for aligning the pedagogy of mobile application development with current industry trends as well as incorporating emerging technologies and concepts that encourage STEM-C (Science, Technology, Engineering, Mathematics and Computing) learning, entrepreneurial endeavors and motivate early academic research.

Speaker Bio: Karl Morris is a Ph.D. candidate in Computer Science at the Florida International University working in the area of Software Engineering with an emphasis on Model Driven Software Development and Middleware. Karl received his B.Sc. and M.Sc. in Computer Science from Florida International University. Karl has worked as a Software Developer, Database Administrator and Project Manager for various private and public sector entities. He is an award winning mobile application developer and is the co-founder of a mobile application development company.