

## **Graduation Project Topics:**

### **1. Defect prediction in open-source projects using machine learning**

Requirements:

- Learning software defects
- Learning public datasets or software metric collection tools.
- Learning machine-learning tools

### **2. Implementation of a tool for detecting violations of coding standards in C++/Java programs**

Requirements:

- Learning C++ or Java coding standards
- Learning Abstract Syntax Tree (AST)
- Learning rule-based methods for detection

### **3. Implementation of a software system (mobile app, game, web app etc.) with high design-quality**

Requirements:

- Learning software design patterns
- Learning optimization algorithms or resource allocation algorithms
- Learning latest technologies (mobile, graphics, interface design etc.)