CSCI-4961-01 Open Source Software

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Licensing

- Our Lecture Slides have greatly benefited from the previous classes taught by Dr. William Schroeder and Dr. Luis Ibanez at RPI,

- And by Professor Mukkai Krishnamoorthy who succeeded them in teaching the course

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Overview

- Course Objectives

- Course Content

- Reading List

- Grading

Course Objectives

- Familiarize with Open Source Software Development

- Reading and Understanding "Good" Code

- Patch an existing Open Source Project

- Work on a team Project

- Aware of team dynamics including diversity issues

Course Objectives (contd)

- Be knowledgeable in at least one software stack.

- Prepare for a new RCOS project for the following semester.

Course Content

- Foundations of Open Source (History and Licensing)

- Software Management Tools (Version Control (git), Documentation Tools (markdown, markup), System Build, Specification and Testing, Collaborative Development

- Software Development Tools (Ipython, javascript (node.js)), Statistical computing(R, Rstudio), Database

Course Contents (contd)

- Software Applications (Web Development, Cloud Computing Platform, Mobile Applications)

- Open Hardware (Arduino, RaspberryPi)

- Projects

Lab Assistants (Masters of the Universe)

- Adrian Collado

  - collaa@rpi.edu

- Alexander Schwartzberg

  - schwaa6@rpi.edu

Class Format

- Monday Lectures/Discussions

- Thursday in class labs – a mixture of programming, development, writing and discussion

Grading

- Quizzes 2 (28th June and 16th August) 20%

- Open Source Project Analysis 10%

- Labs 10 – 30%

- Project 40%

- 93 and above A; 90 and above A-; 87 and above B+; 83 and above B; 80 and above B-; 77 and above C+; 73 and above C; 70 and above C-; 67 and above D+; 60 and above D.

Questions and Discussions