CSCI 2963-01 Open Source Software

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Licensing

- Our Lecture Slides have greatly benefited from the previous classes taught by Dr. William Shroeder and Dr. Luis Ibanez at RPI
- Also thanks to Dr.TV Raman for helping me understand the critical issues.
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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)

- Tom Manizini '16
- Aaron Gunderson'17
- Kiana McNellis '17
- Jim Boulter '17

Guest Lecturers (so far)

- Patrick Masson (opensource.org)
- Brad King '01,'03,'08 (kitware)
- Robert Baron '15 and Jorel Lalicki

Class Format

- Tuesday Lectures/Discussions
- Friday in class labs a mixture of programming, development, writing and discussion

Grading

- Quizzes 2 (4th March and 22nd April) 30%
- Labs 10 30%
- Project 40%
- 93 and above A; 90 and above A-; 85 and above B+; 80 and above B; 75 and above B-; 70 and above C+; 65 and above C; 60 and above C-; 55 and above D+; 50 and above D.

Questions and Discussions