

Instructor

CS389 Software Engineering

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- PhD from France - 1999
Research: Automated deduction and theorem proving, Verification of hardware and software, Data mining, New technologies in education,
- French accent.
- Teaching in France, in Cambodia, in USA (State University of New York at Stony Brook).
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What is cs389?

Prerequisites

- What do you know?
- Familiar with JAVA

- **Course description:** CS389 introduces the concepts, tools and techniques of software engineering. It emphasizes the development of reliable and maintainable software via system requirements and specifications, software design methodologies including object-oriented design, implementation, integration and testing, software project management, life-cycle documentation, software maintenance and consideration of social or human factors issues. Students undertake a semester group project as a major part of the course.
- **Goals:** At the end of this course students will understand what software engineering is and why it is important. They will also be aware of the ethical and professional issues which are important for software engineers. The objectives of this course is at the same time to teach students to build professional quality software individually or as part of a team.
- **Tools:** JAVA ...

Description

- <http://www.csis.pace.edu/~scharff/cs389>
- Everything is/will be on the web.
- Class time
- Office Hours - When? Where?
- Textbooks
- Assignments
 - Project
 - Midterm
 - Final exam
- Grades
- Academic integrity
- Guidelines for assignments

Project ideas

- The project will be implemented in JAVA (mandatory).
- Online PC maintenance and tracking system
- Web based student organizer
- Calendar application
- Fortune wheel game
- Online real estate
- GRE vocabulary learner
- Online lunch order
- Online resumes builder
- Online stock portfolio manager system
- Online hotel reservation system
- E-card sender
- Class library and demonstration program
- Chatroom

Topics

- Introduction (Chapter 1)
- Computer based system engineering (Chapter 2)
- Software processes (Chapter 3)
- Project management (Chapter 4)
- Requirements (Chapter 5 and 6)
- Overview of UML and applications (Chapter 7)
- Software design - object-oriented design (Chapter 12 and 14)
- JAVA overview
- Software testing (Chapter 20)
- Software cost estimation (Chapter 23)