ENSF 381
Full Stack Web Development

Lecture 01:

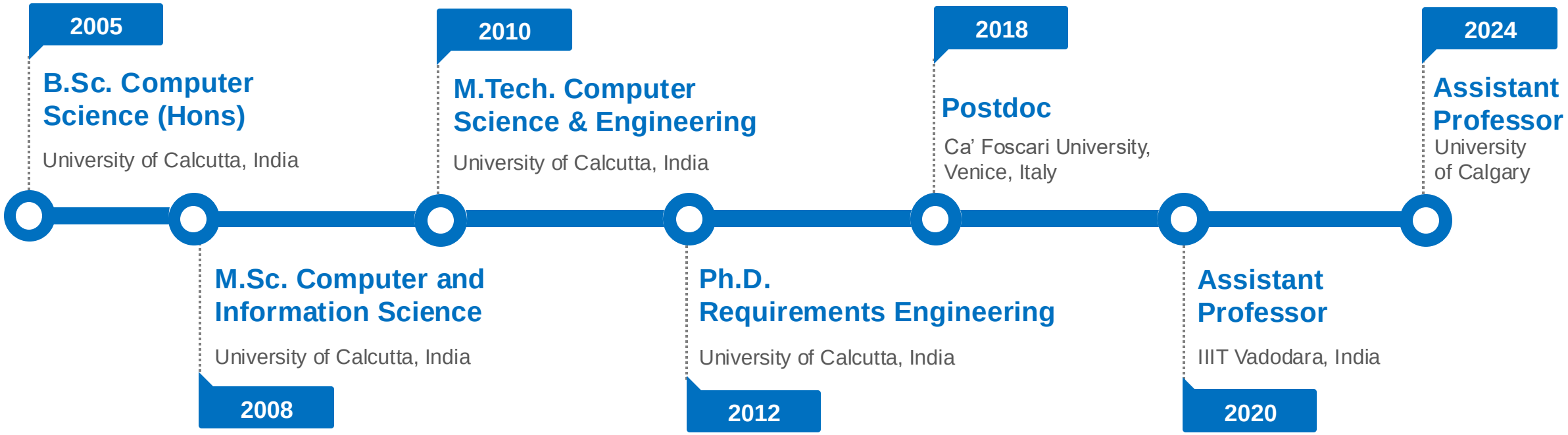
Admin and Introduction

Slides: Ahmad Abdellatif, PhD

Instructor: Novarun Deb, PhD

UNIVERSITY OF CALGARY

About me


2005
B.Sc. Computer Science (Hons)
University of Calcutta, India
2008
M.Sc. Computer and Information Science
University of Calcutta, India
2010
M.Tech. Computer Science & Engineering
University of Calcutta, India
2012
Ph.D. Requirements Engineering
University of Calcutta, India
2018
Postdoc
Ca' Foscari University, Venice, Italy
2020
Assistant Professor
IIIT Vadodara, India
2024
Assistant Professor
University of Calgary

Research Interests

Requirements Engineering

LLMs and GenAI Applications

Transient Micro-services

DevOps, MLOps, AIOps…

Alzheimer’s Disease

Software Engineering

Software Engineering is concerned with:

- RE, Design, development, testing, and maintenance of software applications.

- Apply engineering principles and knowledge of programming languages to **build software solutions for end users**.

This course

Learn about developing a full stack software application:

- Structuring web content.
- Styling web pages.
- Building interactive user interfaces.
- Developing applications with React.
- Creating a backend and connecting it seamlessly with the frontend.

Course outline

Week	Date	Topic
1	Jan. 13	Introduction to Web Development
2	Jan. 20	HTML Fundamentals
3	Jan. 27	HTML Elements
4	Feb. 3	Styling
5	Feb. 10	JavaScript basics
6	Feb. 24	Fetch in JavaScript
7	Mar. 3	React components and Routers
8	Mar. 10	React Hooks and local storage
9	Mar. 17	Introduction to Back-End
10	Mar. 24	Integrating Front-End with Back-End
11	Mar. 31	Continuous Integration (CI)
12	April 7	Review

Evaluation

- Assignments(5) 50%
- Lab deliverables 20%
- Final Exam 30%

- Date of the exam will be confirmed later.

Course Expectations

- Attend lectures and be punctual.
- Attend labs and perform the instructions.
- Do the assignments.
- Bring your ideas and participate in the discussions.
- Study for the exam.

Course Format - Classes

- Three slots:
  - Monday 2:00 PM to 2:50 PM
  - Wednesday 2:00 PM to 2:50 PM
  - Friday 2:00 PM to 2:50 PM
- Classes will explore one or more topics.
- Student participation is highly encouraged.

Course Format - Assignments

- There are concrete deliverables and tasks to be completed in the assignment.

- Teams will be of 2 students.

Assignments	Week due	Weight
Assignment 1	Feb. 7	10%
Assignment 2	Feb. 28	10%
Assignment 3	Mar. 14	10%
Assignment 4	Mar. 28	10%
Assignment 5	Apr. 11	10%

Course Format - Labs

- One slot:
  - Friday 11:00 AM to 12:50 PM
- Labs will be used to apply learned concepts in a practical setting and evaluate the assignment progress.
- Each Lab outcome is evaluated by the TA.
- TAs will provide feedback for lab and assignments.

Course Format – Teaching Assistants

- Zahra Arabi Narei: zahra.arabinarei@ucalgary.ca
- Saviour Owolabi: saviour.owolabi@ucalgary.ca
- Ogechukwu Kanu: ogechukwu.kanu@ucalgary.ca
- Divine Nyamadi: divine.nyamadi@ucalgary.ca
- Mehrnaz Senobari: mehrnaz.senobarivayg@ucalgary.ca

Lateness Policy for All Course Deliverables

NO LATE
DELIVERABLES!!

Assignments are accepted 48 hours late without penalty.

There will be a 40% penalty for late submissions made between 48 and 72 hours

Assignments will not be accepted beyond 72 hours after the deadline.

Academic Integrity and Cheating

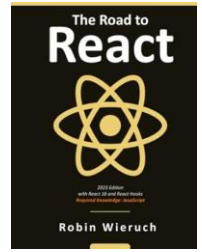
Cheating, plagiarism and other forms of academic fraud are taken very seriously by the University, the Faculty, and the teaching staff.

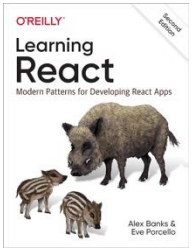
Examples:

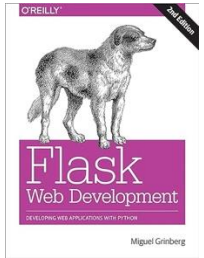
- Submitting the work of another person as your original work
- Incorporating others work in your work and not referencing it
- It is permitted and encouraged to discuss with your peers on the whiteboard but NOT permitted to copy their solutions as they talk to you. Both parties will be penalized.

Course Text

- The Road to React.
- Learning React: Modern Patterns for Developing React Apps.
- Flask Web Development: Developing Web Applications with Python.
- Lecture slides.
- Additional online readings.







Asking questions

Ask me (email, drop by my office)

- Office hours: Monday 3:30-4:00 PM
- Or by appointment

Office Location: ICT246

novarun.deb@ucalgary.ca

Ask in class!!

Questions

Why Full Stack development?