



Ministry of Human Resource Development  
Government of India  
sponsored  
GLOBAL INITIATIVE OF ACADEMIC NETWORKS (GIAN)  
course on



**“FREE/LIBRE OPEN SOURCE SOFTWARE AND THE UNDERLYING TECHNICAL,  
SOCIAL, AND LEGAL ISSUES”**

organized by  
Department of Computer Science  
Guru Nanak Dev University, Amritsar, Punjab, India  
**21<sup>st</sup> February to 25<sup>th</sup> February, 2022**

**Course Overview**

Nowadays Free/Libre Open Source Software (FLOSS) permeates almost every enterprise software system. OSS being free, from any vendor lock-in, attracts many users but still people don't have full faith in OSS products as far as their quality issues are concerned. They may understand the philosophy behind OSS development paradigm, but lack awareness on technical and legal issues of using OSS products.

Therefore, it is important to gain an understanding of FLOSS development tools, processes, and culture. FLOSS education has not yet become an integral part of the computer science curricula. It is mentioned as a sub topic in courses on Software Engineering and other related topics. Even faculty members are not fluent in FLOSS development and don't explore FLOSS while teaching computer science. Keeping in view the interest of the software industry in FLOSS projects, and the lack of avenues for learning FLOSS in a formal setting, we propose this course to bridge the gap.

**About the University**

Guru Nanak Dev University was established in Amritsar on November 24, 1969 to mark the 500th birth anniversary of Sri Guru Nanak Dev Ji. Ever since its inception, it is determined to become an institution of excellence in teaching, research, sports and cultural activities and is conferred with “University with Potential for Excellence” by UGC, accredited with A++ grade by NAAC and “Category One” status; being the only university to earn this elite status in the region of Punjab and Chandigarh. Apart from excellence in academics, continuous efforts to make the University as “Zero Waste Campus” has earned it the status of the second cleanest higher educational institution in the country in the category of Government Universities by the Ministry of Human Resource Development, Govt. of India.

**Course Presenters**

**Foreign Faculty**

Dr. Gregorio Robles is a professor at Universidad Rey Juan Carlos, Madrid, Spain.



His research interests include free open source software, and Computational Thinking. He is specialized in software analytics of Open Source Software Systems with primary focus on mining software repositories, socio-technical issues such as community metrics, software evolution, and development effort estimation. He has developed and maintained several software tools, such as CVSAnalY, a versioning system log analyzer, and Dr. Scratch, a web based gamified computational thinking skills assessment tool. He has also participated in several multi-million-euros European, national, and regional funded projects. Besides international research institutes, he has also collaborated with the software industry. He has served in the program committees of several prestigious conferences in the field of Software Engineering including ICSE, MSR, and SANER.

**Host Faculty**

Dr. Kuljit Kaur Chahal is an associate professor in Computer Science, Guru Nanak Dev University, Amritsar, India. Her research interests lie in Open Source Software, and Distributed Systems. She has been awarded research and travel grants by IBM Research Fund, Google, University Grants Commission (India), and Guru Nanak Dev University. She has served in the program committees of prestigious conferences including ECOOP and OpenSym.



Dr. Munish Saini is an assistant professor in Computer Engineering and Technology, Guru Nanak Dev University, Amritsar, India. His Ph.D is on the evolutionary behaviour of Open Source Software Projects. He has presented his research at reputed international and national forums.



For faculty, and students of universities/colleges; scientists and engineers from R&D laboratories and industry.

The course will be conducted in Online mode  
Register online (compulsory) at: <https://gian.iitkgp.ac.in/GREGN/index> by 16<sup>th</sup> Feb, 2022  
Registration fees: 500/- INR (one-time fee charged by the GIAN portal)

Fill this Google form if interested: <https://forms.gle/STqDFDAKPCRe8P727>  
For any Queries : [ccOSSGIAN@gmail.com](mailto:ccOSSGIAN@gmail.com), (+91)95017-33770

## Program Schedule

Day	L/T	Time	Topic
Monday	Lecture 1	1:10-2:10PM	Introduction to Free/Libre Open Source Software (FLOSS): a Social and Philosophical Perspective
	Lecture 2	2:30-3:30PM	Legal Aspects of Open source Software
	Tutorial 1	3:40-5:40PM	Hands on Important concepts of FLOSS including legal aspects
Tuesday	Lecture 3	11:00-12:00NOON	FLOSS : History and Evolution
22-Feb-2021	Lecture 4	12:00-1:00PM	Applications of FLOSS in AI, IoT, Blockchain and other latest technologies
	Lecture 5	1:10-2:10PM	How to participate in Free/Libre Open Source Software Projects
	Tutorial 2	2:30-4:30PM	Hands on training on using the Git version control system
Wednesday	Lecture 6	12:00-1:00PM	Free/Libre Open source Software Developers
23-Feb-2021	Lecture 7	1:10-2:10PM	Free/Libre Open Source Software Business Models
	Lecture 8	2:30-3:30PM	Using FLOSS in Classroom
	Tutorial 3	3:40-5:40PM	Assessment of Free/Libre Open source Projects
Thursday	Lecture 9	12:00-1:00PM	Free/Libre Open Source Software quality and measures of software quality
24-Feb-2021	Lecture 10	1:10-2:10PM	Free/Libre Open Source Software security and other issues
	Lecture 11	2:30-3:30PM	Free/Libre Software Development Processes
	Tutorial 4	3:40-5:40PM	Hands on SonarQube
Friday	Lecture 12	12:00-1:00PM	Humanitarian and Free Open Source Software
25-Feb-2021	Lecture 13	1:10-2:10PM	Software Analytics tools
	Tutorial 5	2:30-4:30PM	Hands on Software Analytics Tools
	Lecture 14	4:40-5:40PM	FLOSS : The Future Roadmap