INCS-712: Digital Forensics

Course Introductions and Outline

Baljeet Malhotra, PhD

Today's Agenda

- Introductions
- Teaching Assistant (TBD)
- Classroom Rules/Etiquettes
- Course Grading and Evaluation
- Introduction to Digital Forensics

Course Instructor
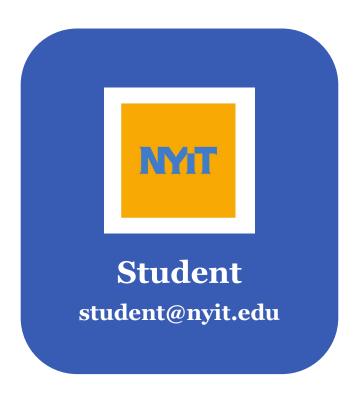
Baljeet Malhotra, PhD
Founder & CEO
TeejLab

- **VP Research, Black Duck Software (acquired by Synopsys for $565MM)**
- **Research Director at SAP; Computer Scientist (EOS Lab) Software Engineer (Tech Mahindra)**
- **PhD (Univ. of Alberta, Canada), PDF (NUS, Singapore)**
- **Adjunct Professor at the Universities of British Columbia, Victoria, UNBC, and New York Institute of Tech.**
- **Advisors to PhD and MSc students ar various institutes/universities**
- **Global Young Scientist (Singapore); NSERC Scholar (Canada)**

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Course TA

Student

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About You?

Course Etiquettes

- Be quiet in the classroom
- Attend classes & exams (no exceptions)
- Plagiarism or Cheating is not acceptable
- Emails asking for marks will be ignored
- bmalho02@nyit.edu

Course Outline (Fall/Spring)

Topic Name	Week
Intro to Digital Forensics and Cybersecurity	W1
Digital Forensics Domains and Processes	W2
Digital Forensics - Investigation Readiness	W3
Digital Forensic Investigations - Criminal	W4
Digital Forensic Investigations - Financial	W5
API Forensics	W6
Mobile and Network Forensics	W7
IoT and Cloud Forensics	W8
Mid Term / Project Proposal Submissions	W9 [Mar 21]
Digital Forensic Tools / Future Directions	W10
Final Project Discussions	W11
Final Project Presentations	W12-W14

Course Resources and Acknowledgements

- Required: Book
  1. [Baljeet Malhotra, "The Art of Digital Forensics", Edition 1, Kendall Hunt; 2025](https://he.kendallhunt.com/product/digital-forensics). Online: https://he.kendallhunt.com/product/digital-forensics
- Required: Laptop
- Reference Books
  1. Sherri Davidoff and Jonathan Ham, "Network Forensics: Tracking Hackers through Cyberspace," Edition 1, Prentice Hall; June 18, 2012.
  2. Brian Carrier, "File System Forensic Analysis," Addison-Wesley Professional; Edition 1, March 27, 2005. ISBN-10: 0321268172; ISBN-13: 978-03212681.
  3. Fernando Carbone, "Digital Forensics with FTK," Packt Publishing ISBN-10: 1783559020; ISBN-13: 978-1783559022.
  4. Bill Nelson, Amelia Phillips, Christopher Steuart, Guide to Digital Forensics and Investigations Processing Digital Evidence.
- Previous Instructors: Wei Li, PhD and Juseop Lim