Intrusion Detection and Hacker Exploits

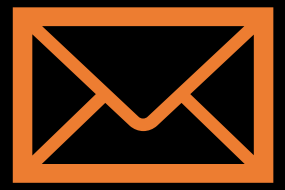
Course Introduction

Sara Khanchi
INCS 745 – NYIT

Outline

- Course Overview
  - Getting to know each other
  - All About the Course
    - Info
    - Structure
    - Assessment
    - Schedule

Course info



Instructor

Dr. Sara Khanchi

Email: skhanchi@nyit.edu

Class time: As shown on PeopleSoft when you registered the course

Office hour:

- Mondays 12-1pm
- You can always send me an email and we set a time

Course Material

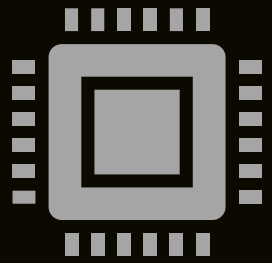
Content and notes will be available on **Canvas**

Who Am I Professionally?

Education

PhD. Computer Science, Dalhousie University

- Thesis: Stream Genetic Programming for Botnet Detection



Background

10+ years of experience in network (security), both industry and academia

Skilled in Network, Network Security, Malware Analysis, Data Analysis, and Machine Learning (Online Learning)

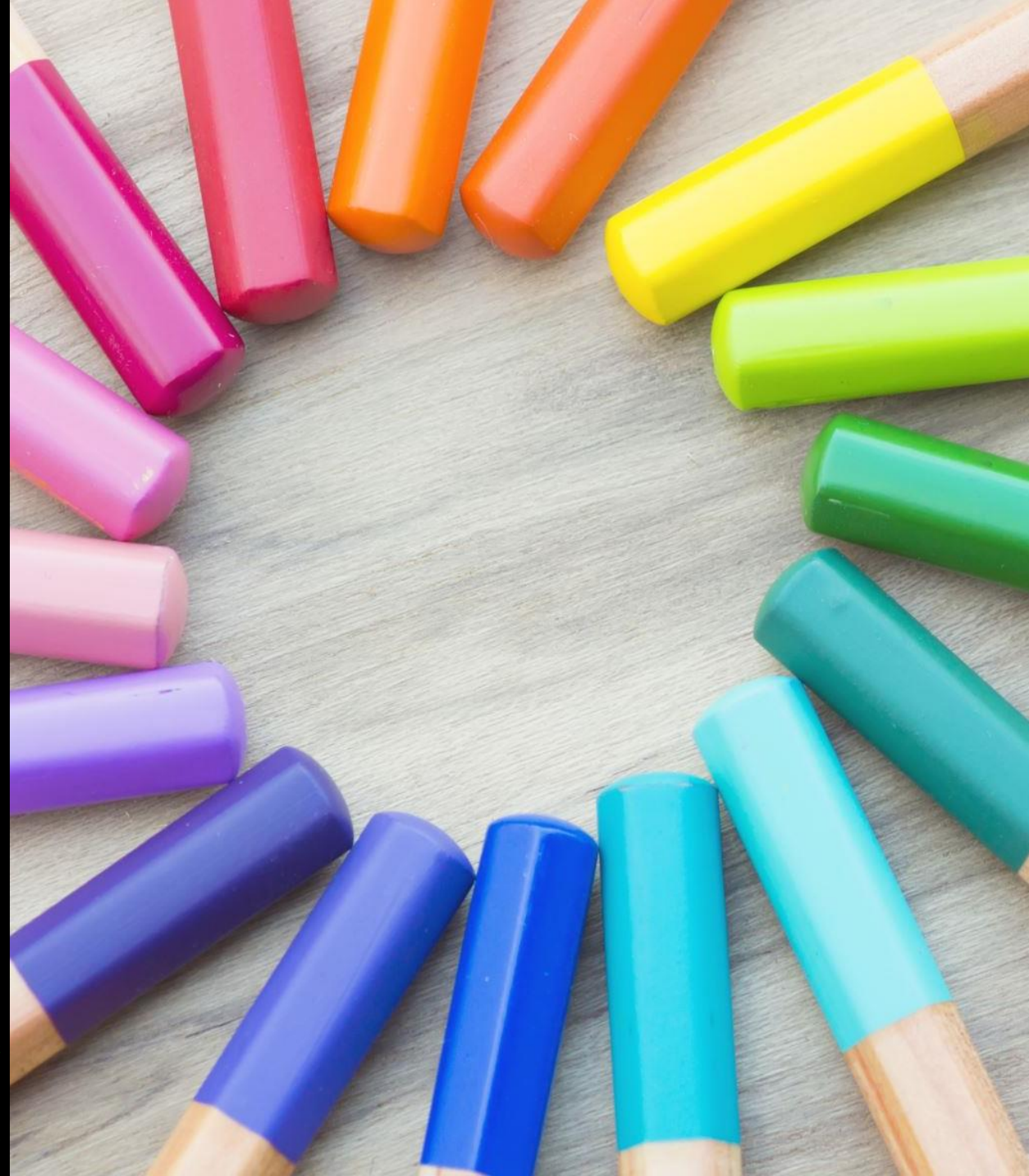
First Assignment!

- Introduction Assignment
  - Please fill out your information in introduction assignment on Canvas (optional)

Real-Time Introduction – Your Turn

- Part 1
  - Create groups of 4
  - Introduce yourself to your group
    - Your name and background
    - How much you know about hacking and pen-testing?
    - A fun fact about yourself

- Part 2
  - In each group
    - In a round-robin format, introduce yourself
    - Your teammate say a fun fact about you
      - Fun Fact Ideas
        - An unusual collection you have.
        - The trip atop your travel bucket list.
        - The profession you wanted when you were a child.
        - The most interesting concert you attended.



What about the Course?

- Prerequisites
  - INCS 615 Advanced Network and Internet Security
  - CSCI 620 Operating System Security

- Sections
  - Ethical hacking
    - Learn about how to find system/network vulnerabilities
    - Learn about how the vulnerabilities are exploited
  - Intrusion Detection
    - Learn about how to detect an intrusion
    - Learn about how to write detection rules

Assessment

Instrument	Percentage of Total Grade
Labs	50
Term Project	15
Midterm Assessment	15
Final Exam	20
TOTAL	100

Grading Guidelines	
Percentage	Grade
90–100	A
85–90	A-
80–85	B+
75–80	B
70–75	B-
65-70	C+
60-65	C
0 –60	F

Assignments

Groups

Maximum 3

Labs

5 labs

Group based and Individual based

Sessions will be held in class and TA will help you to perform the lab

Questions in exams

Demo

- You cannot follow your reports on the demo session

Term Project

1 project

Group based

Presentation at the end of the semester

Submissions

Not in compressed format

Policies / Weekly Schedule

- On Canvas course page
  - Syllabus section

- You need to prepare for each class based on the tasks mentioned for them in the "Tasks for Next Class" column