



**JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND
TECHNOLOGY**

COMPUTING DEPARTMENT

P O Box 62000, Nairobi, KENYA. Telephone: 067-52252/3/4, 067-52711 extn 2804

Fax: 067-52254

**INDUSTRIAL ATTACHMENT
STUDENTS LOG-BOOK**

**(BSC COMPUTER SCIENCE)
(BSC COMPUTER TECHNOLOGY)**

STUDENTS PARTICULARS

Name of Student: Limo Ian Peter
(Surname) (Other Names)

Reg Number: SCT211-0036/2018

Degree/Certificate/Diploma: BSc. Computer Science

Year of Study/Stage 3rd Academic year 3rd

Name and address of company/ institution attached iLab Africa, Strathmore University
Nairobi

Name of Industry-based supervisor Jayson Waigwa

Start date Jan 30th 2023
(Month) (Day) (Year)

End date March 24th 2023
(Month) (Day) (Year)

THE LOG BOOK

2. INTRODUCTION

This logbook is meant to assist students to keep detailed description of the tasks done, and new skills learnt over the course of attachment period. It is also meant to enable industry-based and university supervisors to keep track of the students' progresses, assess their work, and offer guidance where necessary.

2.1 DAILY REPORT

The daily work carried out during the periods of training is to be recorded clearly with sketches and diagrams where applicable.

2.2 WEEKLY REPORT

This is a summary of the work done in a week and should cover theory/ practical report on the worked covered. Students are required to present the log book weekly to the industry-based supervisor for assessment of content and progress. The supervisor can use any page for his or her comments where necessary.

2.2 CHANGE OF ATTACHMENT

A student is expected to start and finish his/her industrial attachment in one establishment. If it becomes absolutely necessary that he /she must change to a different company, the student should secure permission by writing to the university his/her application for a change of place of attachment and should indicate the name and address of company he/she wants to change to.

2.3 UNIVERSITY SUPERVISOR'S VISIT

The University supervisor will check student's log book when he/she visits the students on attachment to ensure that proper training is being received, and record his/her comments on space provided at the end of log book. During the University supervisor can cancel the attachment and advise student to look for attachment elsewhere if he/she feels that proper training is not being offered.

2.4 REPORT WRITING

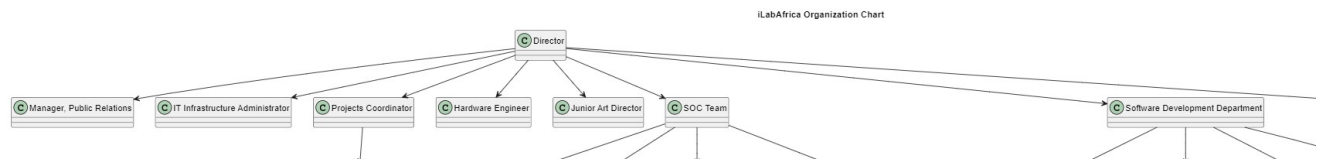
In addition to the daily and weekly record the student should submit a summary report of the work done during the attachment duration e.g., full coverage of the course, problems encountered, suggested improvements to make the programme worthwhile. The report should contain a summary of the activities the student was involved in, challenges met and new skills learnt.

2.5 REPORT SUBMISSION

The logbook must be submitted to the Department/Centre attachment Coordinator at the end of the attachment.

3. ORGANIZATION CHART

The student should draw the organization chart of the company attached in the space below



WEEK 1 PROGRESS CHART (WEEK ENDING : 3rd Feb)

DAY	DESCRIPTION OF WORK DONE AND NEW SKILLS LEARNT
MON	Worked with a team to populate iCPT course timetable. Completed the content discovery room on TryHackme. Learned ways of discovering hidden content on webserver
TUE	Had a meeting to meet the rest of the iLab Africa team. Learned how to detect and exploit SQL injection vulnerabilities.
WED	Learned about web applications and their various security issues.
THUR	I was assigned to the Cybersecurity training department with a team of 5 other people.
FRI	Researched extensively on courses offered at iLab Africa in preparation for the open day including CEH, iCPT and CCSA

TRAINEE’S WEEKLY REPORT

It was a wonderful Introductory week where I improved my skills in Web Application Security and coordinated with the iLab Africa team to achieve a lot.

**Students Signature Date 3rd Feb
2023.....**

**Comments by Lecturer/ Supervisor,
vibrant.....**

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Name Jayson waigwa

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**Signature Date 3rd Feb
2023.....**

**WEEK 2 PROGRESS CHART (WEEK ENDING: 10th
Feb.....)**

DAY	DESCRIPTION OF WORK DONE AND NEW SKILLS LEARNT
MON	<p>Worked with a team to develop guidelines for a Digital Forensics Lab.</p> <p>Completed the Overpass 2 – Hacked on TryHackme. Learned PCAP analysis</p>
TUE	<p>Had a meeting with the security team to discuss upcoming penetration test. Learned how to use tshark for PCAP analysis</p>
WED	<p>Learned about Email Forensics including analysing Email Headers and attachments included.</p>
THUR	<p>I was assigned to a team of 4 other mentees to develop various labs for the Digital Forensics module</p>
FRI	<p>Researched on the OWASP framework for web application penetration testing in preparation for the upcoming penetration test.</p>

TRAINEE’S WEEKLY REPORT

It was an amazing week where I learnt a lot about Digital Forensics and how to reconstruct and attacker’s activity on a network.

I also learnt on how to use the OWASP framework providing some valuable industry-level experience.

Students Signature **Date** 10th February 2023

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Comments by Lecturer/ Supervisor, Ability and effort to learn.....

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Name Jayson Waigwa

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Signature **Date** 10th February 2023

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WEEK 3 PROGRESS CHART (WEEK ENDING: 17th Feb 2023.....)

DAY	DESCRIPTION OF WORK DONE AND NEW SKILLS LEARNT
MON	Had a meeting to receive guidelines on internal penetration test. Completed initial report on penetration test.
TUE	Learned how to use Burp suite to alter intercepted requests. Completed two more reports on the penetration test.
WED	Learned to use ZAP proxy to spider a website and enumerate as much information as possible. Completed a single report on the penetration test.
THUR	Had a meeting with the iLab security team and stakeholders to discuss reports on penetration test.
FRI	Researched on tools to use for discovery of hidden subdirectories and files including dirbuster tool among others.

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TRAINEE’S WEEKLY REPORT

It was a week that gave me the opportunity to advance my web penetration testing skills.

I gained real world experience in writing comprehensible reports and using multiple tools for multiple functions

Students Signature Date: 17th February 2023

Comments by Lecturer/ Supervisor, Good learning curve

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Name Jayson

Waigwa.....

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Signature **Date 17th February 2023**

WEEK 4 PROGRESS CHART (WEEK ENDING: 24th February 2023)

DAY	DESCRIPTION OF WORK DONE AND NEW SKILLS LEARNT
MON	Worked on a performance testing project that required Logging with the Apache JMeter tool. Completed a TryHackme room on Penetration Testing with Python.
TUE	Integrated a custom python script into the Apache JMeter tool to work on performance test better.
WED	Set up Wazuh server to work as a SIEM solution in conjunction with iLab security team.
THUR	Assisted with aggregating reviews for the Women in Cybersecurity program. Had a meeting to discuss SIEM solution with iLab team.

FRI	Worked as an assistant teacher in iCPT class about Linux system.

TRAINEE'S WEEKLY REPORT

It was a very engaging week where I got to improve my scripting skills and my teaching skills as well.

I also got to learn new technologies and how to better use them during work.

Students Signature **Date 24th February 2023**

Comments by Lecturer/ Supervisor, Great
improvement.....

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Name Jayson Waigwa
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Signature **Date** 24th February 2023
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WEEK 5 PROGRESS CHART (WEEK ENDING: 3rd March.....)

DAY	DESCRIPTION OF WORK DONE AND NEW SKILLS LEARNT
MON	Set up Wazuh agents on over 30 computers in a single lab. Took an Introduction to Wazuh course.
TUE	Performed a digital forensics writeup on a networking Lab Completed memory forensics room on TryHackme
WED	Had a meeting with iLab security team to discuss incidence response
THUR	Formed teams to represent iLab in the upcoming picoCTF

FRI	Taught an Introduction to Linux class as a teaching assistant

TRAINEE'S WEEKLY REPORT

It was a diverse week covering multiple modules in digital forensics and incidence response.

Students Signature **Date 3rd March 2023**

Comments by Lecturer/ Supervisor, Good learner and attention to detail

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Name Jayson Waigwa

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Signature **Date** 3rd March 2023

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WEEK 6 PROGRESS CHART (WEEK ENDING: 10th March)

DAY	DESCRIPTION OF WORK DONE AND NEW SKILLS LEARNT
MON	Served as teaching assistant in using Scripting for Security
TUE	Had a meeting with iLab team to discuss teaching of iCPT classes.
WED	Completed TryHackme room on Introduction to Active Directory.

THUR	Taught an iCPT class on Introduction to Active Directory Set up Windows Server 2-16 Virtual Machine
FRI	Set up Windows 10 Enterprise virtual machine and joined it to an AD domain in iCPT class.

TRAINEE'S WEEKLY REPORT

It was a week where I was given a chance to teach AD and serve as a teaching assistant in scripting which was very useful in improving my skills.

Students Signature **Date:** 10th March
2023.....

Comments by Lecturer/ Supervisor: Able to train

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Name Jayson Waigwa

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Signature **Date** 10th March 2023

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WEEK 7 PROGRESS CHART (WEEK ENDING: 17th March.....)

DAY	DESCRIPTION OF WORK DONE AND NEW SKILLS LEARNT
MON	Assisted with documentation and CV editing for application of a tender.
TUE	Had a meeting with iLab team to discuss progress of iCPT classes.
WED	Tackled challenges on picoCTF with team from iLab

THUR	Served as a teaching assistant in Active Directory class about Organizational Units and other Active Directory basics.
FRI	Assisted in setting up a Windows Active Directory on AWS environment.

TRAINEE'S WEEKLY REPORT

It was a week focused on Active Directory configuration in iCPT classes as well as tackling picoCTF challenges.

Students Signature **Date 17th March 2023**

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Comments by Lecturer/ Supervisor, Able to work with other colleagues and students.....

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Name Jayson Waigwa

Signature **Date 10th March 2023**

WEEK 8 PROGRESS CHART (WEEK ENDING: 24th March

DAY	DESCRIPTION OF WORK DONE AND NEW SKILLS LEARNT
MON	Attempted a TOCTOU Race Condition CTF challenge on picoCTF (Time of Check Time of Use) Served as a teaching assistant in an online Windows Active Directory class on Enumerating Active Directory.
TUE	Taught a class on Windows Active Directory dealing with Active Directory Exploitation.
WED	Had a meeting with iLab team to discuss progress of iCPT classes and division of teaching future models.

THUR	Successfully completed a CTF challenge on Reverse Engineering using Ghidra to disassemble code and exploit flaws. This was done on picoCTF.
FRI	Attempted the Power Analysis challenge on cryptography which targeted Power Side channel attacks to extract a secret key.

TRAINEE'S WEEKLY REPORT

This week was heavily focused on learning new skills I cryptography and reverse engineering by use of picoCTF. A number of new techniques were learnt including the TOCTOU vulnerability and Power Side Channel attacks. I also further improved my skills in Active Directory while teaching the iCPT classes.

Students Signature **Date** 24th March 2023

Comments by Lecturer/Supervisor Has shown great development and progress during the period.

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Name Jayson Waigwa

Signature **Date** 24th March 2023

UNIVERSITY SUPERVISORS

(a) FIRST VISIT

Comments

....The environment was conducive for learning specially on Cyber Security. The student....
who gained experienced in teaching and interacting with other staff members.

Name **John Wanaina** _____

Signature

Date: 26/04/2023

(b) SECOND VISIT

Comments

Name _____

Signature _____

Date _____