# News@HIT



### JULY/AUGUST 2018

## Newsletter

#### ISA HOLDS ITS FIRST DIGITAL FORENSIC TRAINING WORKSHOP



Participants during the Digital Forensics Training Workshop.

The Information Security and Assurance Department conducted its first digital forensics investigations short training course entitled "Digital Forensics Investigations Essentials." The course was held on campus from 16-20 July 2018.

The main objective of the course was to help increase the national skills capacity in the field of digital forensics and incident response. Chairperson of the Information Security and Assurance Department, Mr Robert Shonhiwa said the digital forensics investigations course was conducted to fill the gap by training local people in cyber security and digital forensics as well as building a skills base of people who can engage in digital forensics in Zimbabwe.

"The digital forensics course uses relevant and local case studies as well as recent international cyber-incidents to impart hands-on knowledge on how to handle, extract, process and analyse digital forensic evidence through practical lab sessions. This is a foundation level course and we will proceed to train the intermediate and advanced levels in the near future," he said.

The 5-day hands on training course was conducted at the Digital Forensics Lab and facilitated by a team of knowledgeable experts in cyber security. The course was in 5 modules with the first module covering incidence response methodology, preparing and building tools and policies, and steps to be followed if an incident happens. The second module covered the creation of tools to be used to-gather evidence while the the third module covered how to investigate using windows computers. The fourth module covered investigations using the Linux system and hacker tools. The fifth module was about data recovery in the event of an incident including a group assessment work.

Participants were drawn from the police, military, POTRAZ, HIT, ICTs industry and security firms.

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#### ELECTRONIC ENGINEERING DEPARTMENT HOLDS STAFF SEMINAR



Director of Technology Transfer and licensing Centre (TTLC) Eng. T. Garikayi addressing the Electronic engineering department staff

The Electronic Engineering Department held a two-day staff seminar under the theme "Driving Innovation and Strategic Technology Transfer Through Technopreneurship" from 19-20 July 2018.

Chairperson of the Electronic Engineering Department, Eng. C. Kanyunga said the objectives of the seminar were to discuss departmental activities, the generation of new research ideas and capacity utilisation of the department's resources. "This seminar is discussing the department's vision, tactical plans, ethics, review of the programme structure. Other issues include the department's research areas and projects, SWOT analysis, academic regulations and examination procedures, internship placement and industrial engagement plans, project design and procedures, project supervision and mentorship as well as project proposal writing and engineering dissertation writing," he said.

Eng Kanyunga added that the seminar was also an induction workshop to prepare themselves for hosting a number of academic workshops and conferences in the near future. "We are also working one modalities to ensure our innovations and technologies are transferred into the community as well as how best to individually and collectively contribute to the research agenda in line with the "New National Dispensation." We have also invited industrialists to give us a framework of their expectation, their needs, and how to advise us on how we can assist as a department in developing synergies that will enable fruitful collaborations and cooperation's with them," he said.

The seminar also addressed by the Vice Chancellor Eng. Q.C Kanhukamwe, Dean of the School of Engineering and Technology Eng. P. Muredzi and the Director of Technology Transfer and Licensing Centre (TTLC) Eng. T. Garikai.

In his address, the Vice Chancellor Eng. Q.C Kanhukamwe emphasised that the department's research activities must be responsive to the needs of the nation. "There is nothing you can't do if you become focused and programmatic. Let's raise out research activities and believe in ourselves that we can do anything together, making sure that we move forward. Let me assure you of our support and anytime you wish to engage us, we will be there. Our doors are

open for business and innovations," he said. The Vice Chancellor also urged departmental staff to work closely with the Technology Transfer, Commercialisation and Licensing Centre (TTCLC). Eng. T. Garikayi, Director of the Technology Transfer and Licensing Centre (TTLC) also gave a presentation of some of the research projects that are in the process of being commercialised and licensed.

The Technology Transfer, Commercialisation and Licensing Centre (TTCLC) is a newly established entity that is responsible for the management of the Institute's Research, Development and Innovation outputs. The Centre is responsible for technology transfer in terms of commercialization of inventions and discoveries, tech-licensing and business ventures including, but not limited to, joint venture partnerships and venture capital. It is the hub for venture mentoring services and establishment of a cross functional technopreneurship forum. The main role of the Centre is to manage the Harare Institute of Technology's Intellectual Property and Innovation Policy. This role includes advising on the synthesis and extraction of registerable IP from staff and student projects.



Vice Chancellor Q.C Kanhukamwe



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#### WELCOME RECEPTION FOR RETURNING STAFF **DEVELOPMENT FELLOWS**



Part of the staff development fellows who attended the Welcome reception.

A Welcome Reception for Staff Development Fellows who completed their M.Tech degrees at various universities in India has was held on 8 August 2018 in the Engineering Hall.

In his address, Vice Chancellor, Q.C Kanhukamwe called on the fellows to embrace and apply the tenets of the University Education 5.0 and Industry 5.0. in order to innovate and industrialise as the nation moves towards a middle income economy by 2030.

"All along Universities have been operating on three tenets; teaching, community service and research, but since the coming in of the New Dispensation, two more tenets have been added and these are innovation and commercialistion. All these strands have been residing in HIT since its formation through the technology centre; a convergence of all our laboratories and workshops. Now, we have created the Technology Transfer and Licencing Centre to be able to licence and commercialise our products and innovations," he said.

Vice Chancellor Kanhukamwe urged the returnees to be unrestrained in their pursuit of providing innovative and technological solutions to the nation, calling on them to be programmatic and systematic. " Let us be part of making Zimbabwe a middle-income country by 2030", he concluded.

Some of the Staff Development Fellows who were given the opportunity speak on their experiences and what they learnt in India, expressed their gratitude to the Institute for according the opportunity to continue with their professional development, promising to implement what they learnt in their teaching and research activities.







#### HIT STUDENTS EXCEL IN THE ZIMNAT HACKATHON



HIT students who excelled in the ZIMNAT Hackathon, HIT staff and ZIMNAT Holdings executive staff at the company's Headquarters.

HIT students who excelled in the ZIMNAT HACKATHON received their awards at the company's Headquarters on 21 August 2018.

Team I-CHEQUE, made up of John Sakala, A m e n M u s h a n y u k i and P hilip Mashingaidze emerged winners and walked away with shields and prize money of \$400 per person in the Hackathon aimed at proffering a solution towards the digitization of services and products for ZIMNAT.

Team Eazie clinched second position, with prize money of \$200 per person, - and was

comprised of Itai Zulu, Susan Chikerema and Augustine Mukumba. Third and fourth place winners walked away with \$100 and \$50 per person respectively and a certificate of participation.

Four teams, comprising 12 students in total from the Electronic Commerce and Financial Engineering departments took part in the ZIMNAT Hackathon aimed at proffering a solution towards the digitization of services and products for ZIMNAT.

The Hackathon was convened by ZIMNAT Holdings, in partnership with the Harare Institute of Technology School of Business and Management Sciences.

Speaking at the awards ceremony, CEO of ZIMNAT Holdings, Mr Mustafa Sachak said ZIMNAT was very excited and inspired by the calibre of presentations from HIT students, expressing confidence in future collaborations with the University.

Dean in the School of Business and Management Sciences, Mr Willard Gwarimbo said he remained committed to the partnership with ZIMNAT, which ultimately aimed to strengthen the economy and nation at large.



The wining team with ZIMNAT CEO, Mr Sachak and Dean Gwarimbo.



#### TTLC SHOWCASES AT ZIM AGRIC SHOW



The HIT stand at the Zimbabwe Agricultural Show (ZAS) 2018.

The Technology Transfer and Licensing Centre, (TTLC), established to champion the University's commercialisation thrust, led the HIT exhibit at the just ended Harare Agricultural Show from 27 August to 1 September, 2018 at the Exhibition Grounds. The show was held under the theme: "Field to Industry: Produce...Connect... Develop," while the HIT theme for the event was "University to Industry: Develop, Incubate, Transfer, Commercialise and Industrialise."

The HIT theme was informed by the broader national context of Government policy and directives on the absolute need for universities to connect with industry in aiding economic and national development, through the application of Industry 5.0 which calls upon universities to move away from its traditional role of teaching, research and community service to industrialise and commercialise.

Stakeholders included Government departments, parastatals, IP specialists, private sector, parents, alumni and prospective students.

#### HIT START UPS ON EXHIBIT

students to have ACCESS to recommended video based-educational content which is created to give the learner a localized and personalized learning experience. NHAKA e-learning offers video based learning content for each topic, real life lab-based science experiments and giving updates of student progress and continuous assessment report. NHAKA e-learning can also be used as a school management system which helps for better management of school academic process and administration, and can be accessed on different platforms that is as desktop based platform, web based platform and mobile based platform.

#### **NECECITY**

Nececity offers technological solutions to the transport sector by making use of mobile technology to improve public transport reliability. The system offers a real time visual tracking of buses, searching of routes and notifications from the service provider. It also has the ability to inform users on delays that may occur and also enables the creation of new routes, and addition of new bus stops by service administrators.

#### Nhume

Nhume is an environmental, water and energy management system, which through real time messaging & analysis, helps regulatory authorities and city councils to monitor pollution levels from anywhere in the country. The system was developed to monitor and detect any unsafe levels of pollution in treated water, effluent discharges and air around industrial and mining areas.

#### **One Trade**

One-Trade is an online E-commerce platform for buying and selling products through the internet. Sellers can upload products, add prices and change them where necessary and receive payments using the stated banks or payment mode.

Customers from different parts of Zimbabwe can also visit the online platform and create accounts and log in to see products being sold by different sellers. Onetrade will encompass different modes of payments such as Ecocash, OneMoney, TeleCash and others. The Onetrade online E-commerce platform will also come with an Android Application which can be installed on android phones.





#### **BUSE TEAM SCOOPS FIRST PRIZE IN GOLF TOURNEY**



Bindura University of Science Education (BUSE) team holding the winners trophy.

The Bindura University of Science Education (BUSE) team comprising E. Manhando, S. Manhando, C. Chadzingwa and D. Zulu scooped the overall winners of the annual Vice Chancellor's Innovation and Scholarship Fund Golf Tournament held on 10 August 2018 at the Chapman Golf Club in Harare.

The BUSE team emerged winners with 109 points, was awarded a floating trophy award.

Mr H.Z Maeresa. Murinda had the longest drive to the eighteenth hole, while Mr C. Murinda had the nearest shot to the third pinhole at the third hole. Over 60 participants drawn from the Institute's stakeholders, senior management and staff took part in the Four Ball-Better Ball Alliance tournament held to raise funds for the Vice Chancellor's Innovation and Scholarship Fund. Income generated through this tournament is channeled towards financing intelligent students; Capstone Design Projects with the potential for commercialisation, as well as procuring equipment for workshops and laboratories.

Speaking during the Cocktail session, HIT Vice Chancellor, Eng. Q.C. Kanhukamwe extended his appreciation to all the stakeholders for their invaluable support over the years and for making it possible to host this event every year since its establishment in 2015. "We thank all the participants who came out to support us in our quest to invest as well as bring out the talent in our students who are underprivileged. this fund is broad in its objectives to supporting students' projects capable of being commercialised. One of the beneficiaries Douglas Gweera is graduating this year with a first class degree in electronic engineering,"he said.

