

ASSESSMENT OF ANNUAL ACTIVITY PLAN OF PhD STUDENT academic year 2023/2024

PI	nD	et	nd	lan	+
	11/	21	uu		

Name and surname, academic degree:	Dawit Dejene BIKILA
STAG ID:	E22843
Study programme:	Applied Informatics
Form of study / Year of study:	Full-time / 2 nd
Commencement date:	31. 10. 2022
Supervisor:	prof. Ing. Jan Čapek, CSc.
Faculty institute (workplace):	Institute of System Engineering and Informatics
Dissertation title:	Cyber Security of IoT

Study plan

Coı	npulsory courses	Number	P		l year lment	of	Date of
		of ECTS	1.	2.	3.	4.	Examination
1	Methodology of Scientific Work	15					02-04-2024
2	Advanced Methods of Mathematics and Statistics	15	,	х			
3	Theoretical Informatics	30		х			
4							
Cor	npulsory options / Optional courses						L
5	Theory of Data and Information Security	10		х			
6	Artificial and Computational Intelligence	10					
7							
8							
9		, , , , , , , , , , , , , , , , , , , ,					
Sta	ite Doctoral Exam				х		
De	fence of Dissertation Thesis					х	



Stage of work on the dissertation

Proposed Plan	Real Achievements
Finding novelties in the field of dissertation proposal using literature review	

Scientific-Research Activities of PhD studen		
Publication outcomes of PhD student, part	ticipation in projects or other relevant	activities
performed in a particular academic year:		
Proposed Plan	Real Achievements	Points
Internship at a foreign institution.	The internship has been completed successfully at the Constantine Philosopher University in Nitra, Slovakia.	
One conference paper or article preferably in the Scopus database.	Accepted conference paper in the title: "MESSAGE BROADCAST METHODS FOR THE INTERNET OF THINGS" IDIMT-2024 New Challenges for ICT and Management 31st Interdisciplinary Information Management Talks. SCOPUS indexed.	œ
Participation in SGS project	"MACHINE LEARNING-BASED ATTACK DETECTION FOR THE INTERNET OF THINGS" A journal article was submitted to the Future Generation Computer Systems journal, (Q1) and is currently being revised. Participated in the SGS.	



Pedagogical activities of PhD student

Courses taught, format of teaching or other relev	ant pedagogical activities in a particular year:
Proposed Plan	Real Achievements
Teaching "Artificial and Computational Intelligence" for 2hrs pre-weeks in the summer semester,	The pedagogical activity of teaching the subject "Artificial and Computational Intelligence" for 2hrs a week was completed under Ing. Katrina Prihodova, Ph.D. The pedagogical activity of teaching the subject "Modelling and Simulation" for 4hrs a week was completed under Professor Jan Čapek, CSc.

Study stays in the Czech Rep. and abroad / Internships, international cooperation etc.

Internships and study stays in a particular acaden	nic year:
Proposed Plan	Real Achievements
The internship will be performed during this academic year.	Completed: The internship was completed successfully at the Constantine Philosopher University in Nitra, Slovakia. Advanced data analysis using statistical analysis tools, for data preprocessing for ML-based attack detection model development.

Supervisor's signature:	Head of the institute's signature:
-	Supervisor's signature:



Evaluation of student activities performed in a particular academic year:

- Mr. Bikila wrote an article "Machine Learning-Based Attack Detection For The Internet Of Things" A journal article was submitted to the Future Generation Computer Systems journal and is currently being revised.
- Mr. Bikila also wrote a conference paper accepted in the IDIMIT conference, Proceedings from the IDIMT conference are included in the Web of Science and SCOPUS.
- He completed pedagogical duties in teaching the subject "Artificial and Computational Intelligence" for 2 hours a week as completed under Ing. Katrina Prihodova, PhD, and
- the subject "Modelling and Simulation" for 4hrs a week was completed under my supervision.
- The exam for methodology of science work is fulfilled, and exams for Advanced Methods of Mathematics and Statistics, Theoretical Informatics and Theory of Data and Information Security are planned for the winter semester of the academic year 2024/2025.

• The internship has been completed successfully as planned.

Supervisor's recommendation to continue study of PhD student:

Supervisor's signature:

Agreement on the supervisor's recommendation by the head of the institute:

Head of the institute's signature:

Discussed by members of the advisory board on:

Summary by the advisory board's signature:

Comments by the dean regarding the annual assessment:

Dean's signature: