



Securing Tomorrow's AI/ML, Today!



Mormor Karl

Reliable ML / AI

Xuan-Son (Sonny) Vu (PhD.)

Assistant Prof. at RSS, CS Department, LTH
Founder at DeepTensor AB
CTO at WASP Media & Language, UMU

Email: xuan-son.vu@cs.lth.se / s.vu@deeptensor.ai



LUNDS UNIVERSITET

Xuan-Son (Sonny) Vu

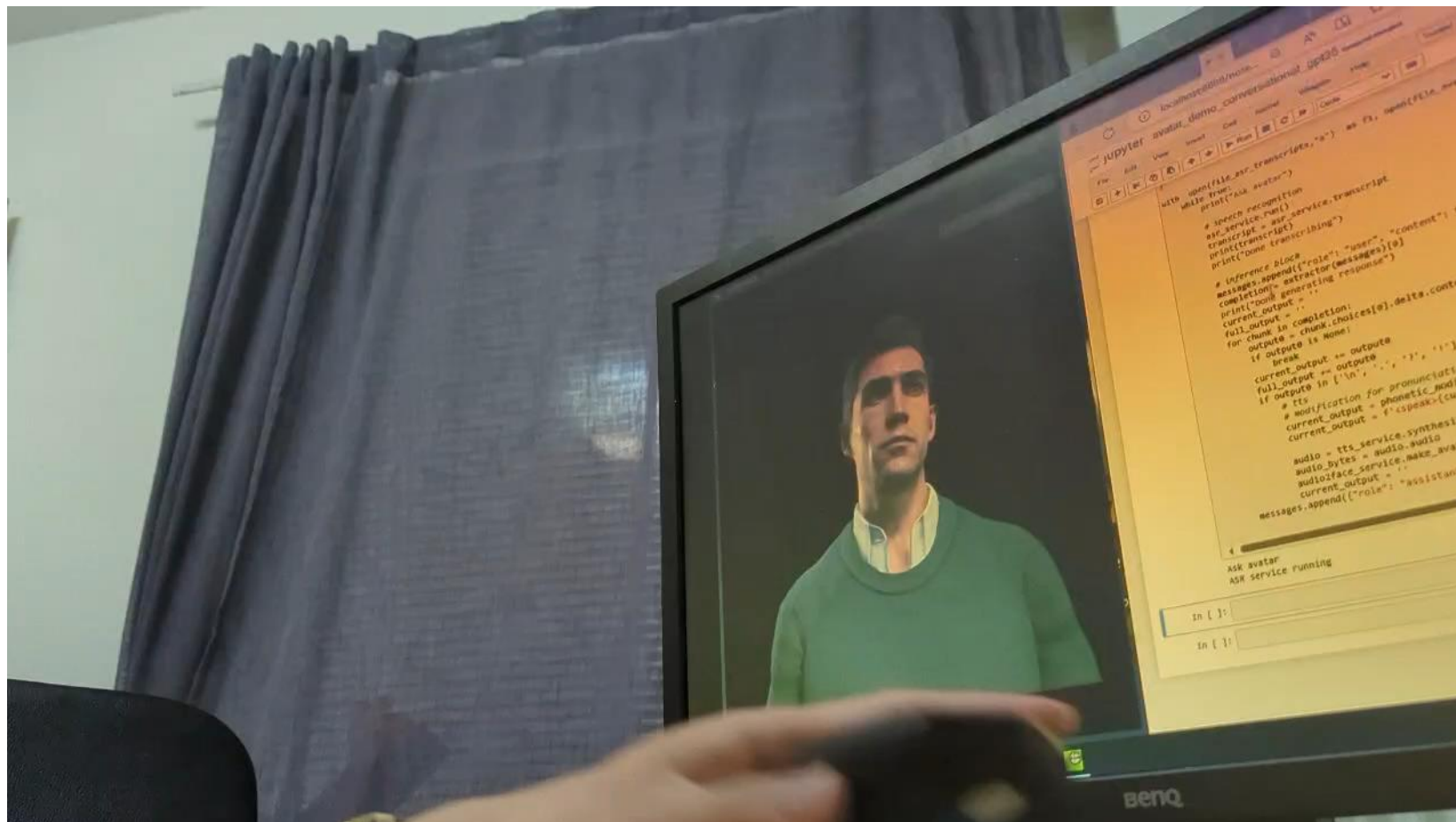
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- Profile:
 - PhD. in privacy-preserving ML
 - MSc. in natural language processing + ML
 - BSc. in opinion mining
- Research interests:
 - Trustworthy ML/DL, graph learning in NLP/**multimodal data**, meta learning
- Research contributions:
 - Co-authored different neural models - e.g., ppRNN (faster version of RNN), MGTN (modular model), SGTN (privacy-preserving), Cformer (meta pseudo labels).
 - Published at top conferences: AAAI, WWW, ACMMM, EMNLP, COLING, CICLING
- Founders:
 - MLOPs.VN, AIHUB.ML, and DeepTensor AB (securing AI/ML solutions)
- Long-term research:
 - Reliable ML/AI, acquiring knowledge from multimodal data, and using structured knowledge to power downstream applications (AI/IoT, Robotics, Healthcare).
 - Knowledge to solve: ML + data science



VIRTUAL AVATAR (KEVIN)



VIRTUAL AVATAR (JADE)



PROJECTS

- AI-operator (1-3 students)
 - Supervisors: Sonny Vu, Johanna Björklund
 - Work with Virtual Avatar framework
 - Enhance it with screen operation
 - Write report
- Motivated Intruder (NLP) (1-2 students)
 - Supervisors: Sonny Vu, Elena Volodina, Therese, Simon
 - Questions:
 - How well do we protect writer's identities by applying pseudonymization?
 - How does the profile of "motivated intruders" facilitate/impede re-identification?
 - How many pseudonym groups are necessary to protect writers? Which ones?
 - TODO:
 - Design GUI for the motivated Intruder tests
 - Experiment
 - Write report

