2021-10-29 AI/ML for NFV Meeting Minutes

Attendees

Sridhar Rao

Beth Cohen

Steven Casey

Kuldip Yadav

Ildiko Vancsa

Sl. No.	Topic	Presenter	Notes
1	EUAG Paper: Action Item Discussions ☑ Platforms ☑ Related Projects ☑ Data Modeling ☑ Repository of Problems ☑ Test and Certify. ☐ Training		Platform: Data Pipeline? ML-Models ? Language/libraries ? Integration-Flexibility ? Project: Explore O-RAN. Data Modeling: (a) Sources (b) time-series (c) logs (d) understanding of the columns (e) Terminologies used (f) naming consistency. Can YANG help ? (To Explore). Does YANG already cover metrics/logs - infrastructure monitoring ? **Is there any platform** which is normalizing multiple-sources and having a common data model? Repository of the problems (use-cases). Example of where bias in data can have unintended consequences: https://courses.cs.duke.edu//spring20/compsci342/netid/readings/facialrecnytimes.pdf Test/Certify: ML-Model. Against **Common Training + Test** Data. Metrics: Speed + Accuracy. Publish: Training and expected metrics. Richness of the data-set is very important. Training: Amount of training available on AI/ML and Networking in public is **HUGE**. LF-Course?\ https://www.prnewswire.com/news-releases/att-and-h2oai-launch-co-developed-artificial-intelligence-feature-store-with-industry-first-capabilities-301410998.html
2	Kubernetes Failure Emulation		Hypothesis: **We cannot emulate failure of a pod, by running stress tools**. CPU loads have no impact. Even if you allocate 2GB RAM (with static configuration), and do memory operation (stressng) with buffer size of 4 to 6 GB, still there will be no failures. Tried these configurations: https://github.com/opensource-tnbt/stressng-images. **What is more important ML-problem for K8S for NFV usecases is an open question ?**
3	GANs for Synthetic Data Generation		Moved to Next week due to non-availability of the students. Ildiko: Open Telemetry meeting (OIF), focus is on kubernetes. Area of **Tracing**. eBPF/Jaeger.
4	BERT for Openstack Log Analysis		

5	Webinar, Testing Forum		Role of the Projects such as Thoth.
			
			• Intelligent Networking webinar - ~45 minutes prepared material and ~15 of Q&A
			• Focus on what has been done in support of the findings
			• Propose inviting Sridhar Rao from Anuket's Thoth project to participate in the webinar
			• Panelists: Beth Cohen, Massimo Banzi, Sridhar Rao Lei Huang Yuhan Zhang
			• Recommendation for early December date
			
			• **LFN Developer & Testing Forum, Jan 10-13, 2022**
			  ◦ Description of Thoth participation session – Add session
			  ◦ Event wiki 2022 LFN Developer & Testing Forum January