

2021-09-24 AI/ML for NFV Meeting Minutes

Attendees

[Sridhar Rao](#)

[Beth Cohen](#)

[Akanksha Singh](#)

[Rohit Singh Rathaur](#)

[Kanak Raj](#)

[Jahanvi Ojha](#)

[Girish L](#)

[Timo Hauswirth](#)

[Vidyashre](#)

[Renuka](#)

[Hemashree](#)

[Al Morton](#)

[Ildiko Vancsa](#)

[Sandra Jackson](#)

Sl. No.	Topic	Presenter	Notes
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1	AlgoSelector Update	Sridhar Rao	Supervised Learning: key goal of regression analysis is to isolate the relationship between each independent variable and the dependent variable https://statisticsbyjim.com/regression/multicollinearity-in-regression-analysis/ Multicollinearity: changes in one variable are associated with shifts in another variable Started with the implementation. Request for Feedback. Goal For Next Week: Unsupervised Learning.
2	Failure Emulation Update	Sridhar Rao	No Breakthrough Yet. Still Trying with stress-ng (interrupts, system-calls, ...)
3	FP Model Development Update	Rohit Singh Rathaur Girish L	Documentation: Pending Demo <code>models/failure_prediction/ *.ipynb, models/failure_prediction/static_htmls, models/failure_prediction/data_preprocessing.</code> Rohit presented his work as part of the 'Final-Presentation' of his Internship. Beth: Were the results expected? Girish/Rohit: Steve: Out of 26 features, only 6 features are used. This choice is based on? Girish/Rohit: Girish: Going ahead, we will try with better data and improve these models. Rohit: Continue to contribute to Thoth. Target date for Whitepaper: October 20th.
4	Data Extraction Tool Status	Sridhar Rao	Stuck at Prometheus (tested), Elasticsearch(untested).
5	Synthetic Data Generation - GANs	Girish L et. al.,	Generate Monitoring/logging data using GANs. This is a new project to create synthetic data for testing of operational ML algorithms. The idea is to create this data set to be used across the industry as a reference data set. Hemashree, Vidyashree, Renuka

6	Exploration: Openstack Log Analysis	Girish L	Openstack Logs: Existing Approaches: ELK - Kibana + Alarms. Analysis: Common approach is using NLP. Approach: Google's BERT model for Openstack Logs. Problems: Anomaly Detection + Pattern Analysis Deekshita and Rakshita - NLP, Try with Openstack Logs (??) Data: https://github.com/logpai/loghub/tree/master/OpenStack Use of NLP for Openstack Logs has already been tried: https://www.cs.utah.edu/~lifeifei/papers/deeplog.pdf . This work will be used as a reference.
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