**AI/ML Models for NFV Usecases**

**Internship Projects/Mentors**

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<th>Title</th>
<th>AI/ML Models for NFV Usecases</th>
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<tr>
<td>Status</td>
<td>APPROVED</td>
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<tr>
<td>Difficulty</td>
<td>HIGH</td>
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**Description**

This project aims to deploy and run AI/ML models for NFV-usecases. Any two of the following three problems can be considered.

1. VNF/CNF Placement
2. VNF/CNF resource/performance/failure prediction
3. Packet-Loss Classification

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<tr>
<th>Problem</th>
<th>Model</th>
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**Additional Information**

LFN Acumos: [https://www.acumos.org/](https://www.acumos.org/)

TensorFlow Time Series: [https://www.tensorflow.org/tutorials/structured_data/time_series](https://www.tensorflow.org/tutorials/structured_data/time_series)

Collectd: [https://collectd.org/](https://collectd.org/)

Hosting Repo: As a Subproject under CIRV - [https://github.com/opnfv/cirv](https://github.com/opnfv/cirv)

**Learning Objectives**

- ML model development
- AI/ML for Telco Usecases.

**Expected Outcome**

- Enhance Acumos with model for NFV/Telco Usecases.
- Run Acumos with these enhancements in Anuket Testbeds.
- Comprehensive report on applications of AI/ML in Networking (*Comparative analysis*).

**Relation to LF Networking**

- Will be part of Anuket.

**Education Level**

- Undergraduate
Skills
Knowledge of ML and ML-Tools - Tensorflow.

Future plans
This work is the first step toward use of AI/ML in Telecom Networks, it can be enhanced to more useful and complex usecases.

Preferred Hours and Length of Internship
Part-Time

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