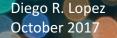
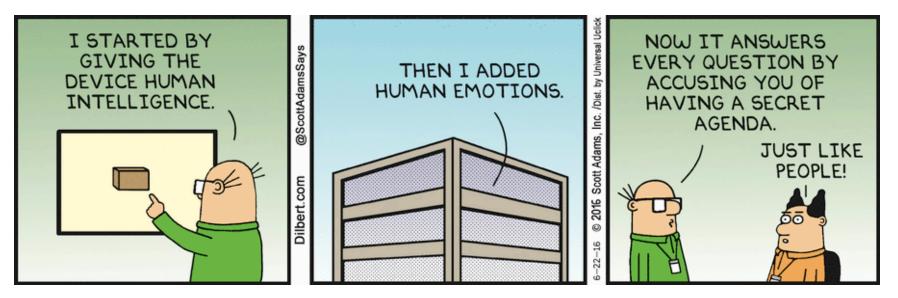


# Nourishing Network Control Intelligence



WE CHOOSE IT ALL

#### What Intelligence Requires



- A purpose beyond divergent goals
- Aliment to grow and strengthen
- Guidance from the elder and superior ones





#### The Raison D'être: Automation

- Taking advantage of the Software Network
  - Elasticity
  - Homogeneity
  - Programmability
  - Abstraction
- In a changing network landscape
  - Pervasive encryption
  - Internet stack evolution
  - $\circ$   $\,$  And the advent of 5G  $\,$

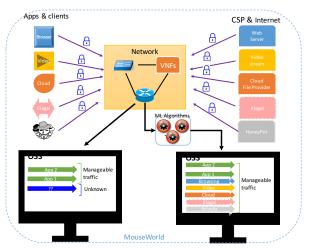




## Data, Food for Thought

- Many mechanisms proposed
  - But not demonstrated in operational conditions
- Heavily dependent on training and testing data
  - o Datasets are hard to obtain
- Datasets are even harder to apply
  - o Incorrect tagging
  - o Unknown biases
- A hybrid environment
  - o Combination of synthetic and real data
  - o Controlled datasets







## Putting the Human in the Loop

- Integrated development environments
  - A single intent-based entry point
  - Supporting a dialectic way
- Open collaborative experimentation
  - Try and train
  - Support data generation
- AAAAA...
  - Audit track: the who, the what, the when
  - Security in all aspects



Compu

NFVI

Data Plane Switch

nodes

