

# Design FLC for Optimal Fan Speed

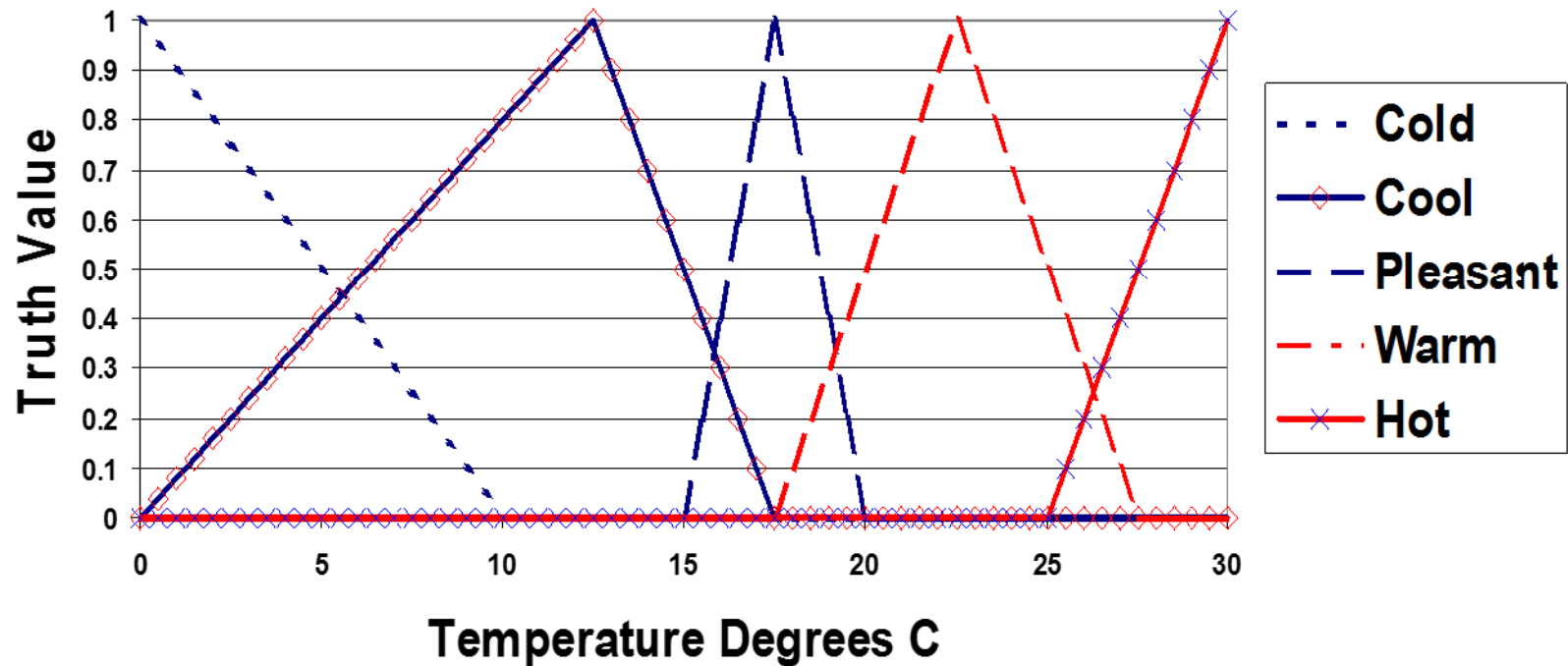
Referring to Fan Speed problem as given in Fuzzy set for antecedent: Temperature, consequent: Fan Speed consider these problem:-

- a. Temperature of 7 degree Celcius.
- b. Temperature of 20 degree Celcius.
- c. Temperature of 28 degree Celcius.

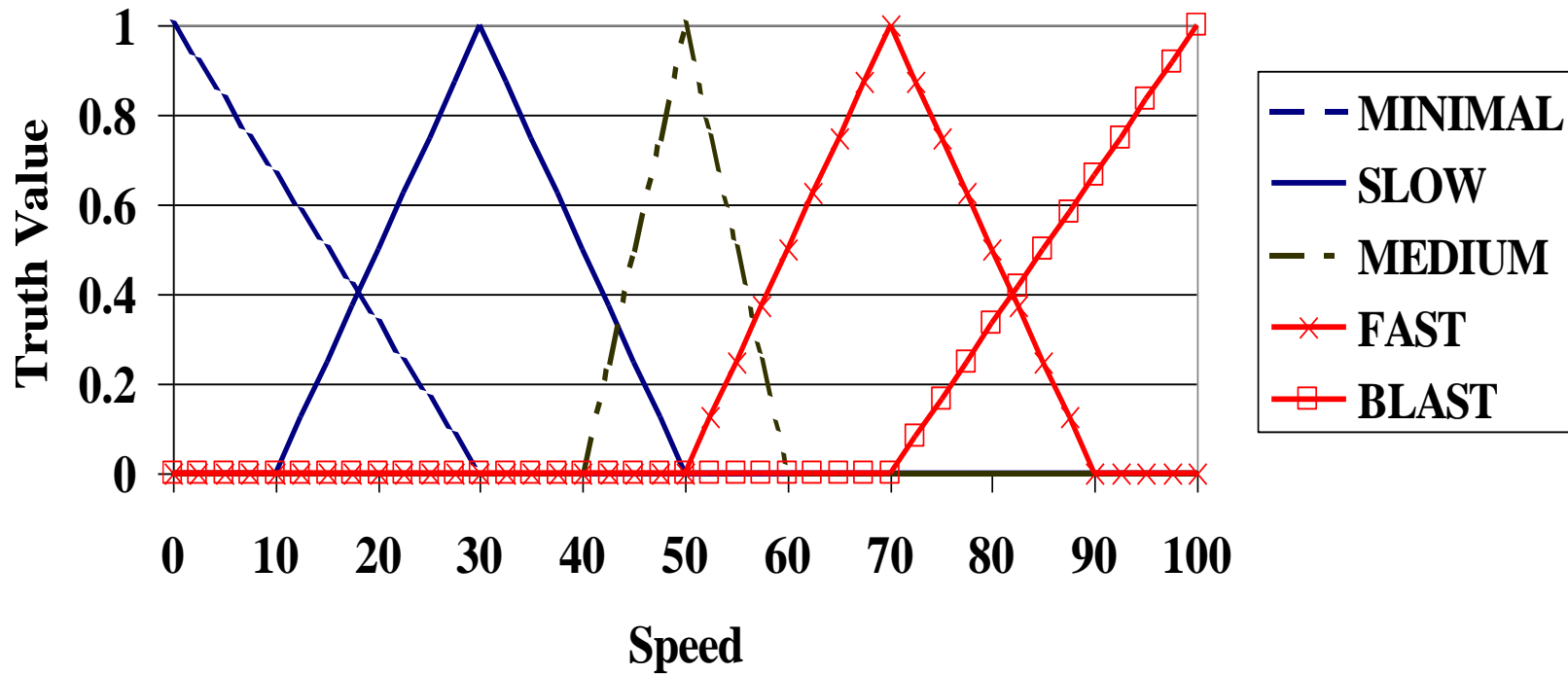
Compute the optimal fan speed Using Fuzzy Logic Controller.



## Temperature Fuzzy Sets



## Speed Fuzzy Sets



- ▶ RULE 1: IF temp is cold THEN fan speed is minimal
- ▶ RULE 2: IF temp is cool THEN fan speed is slow
- ▶ RULE 3: IF temp is pleasant THEN fan speed is medium
- ▶ RULE 4: IF temp is warm THEN fan speed is fast
- ▶ RULE 5: IF temp is hot THEN fan speed is blast

