



Progress

Carlos Padilla

Bellman's
equation

Task Execution
Model

Overall
Performance
Metric

Introduction

UML

Reward function's
schema

Project Progress

Carlos Padilla
enigmak9@protonmail.com

ICN, UNAM

April 23, 2024



Bellman's equation

Progress

Carlos Padilla

Bellman's
equation

Task Execution
Model

Overall
Performance
Metric

Introduction

UML

Reward function's
schema

$$V(s) = \max_a \{R(s, a) + \gamma V(s')\} \quad (1)$$



Task Execution Model

Progress

Carlos Padilla

Bellman's
equation

Task Execution
Model

Overall
Performance
Metric

Introduction

UML

Reward function's
schema

$$M_j = \left(\left[I, t'_j, \Delta t_j, P_j^R, P_j^D \right], \left[W_I^R, W_I^D \right] \right)$$



Reward Function - Part 1

Progress

Carlos Padilla

Bellman's
equation

Task Execution
Model

Overall
Performance
Metric

Introduction

UML

Reward function's
schema

$$\xi_j = S_j P_j e^{\left(\frac{t_j^E - t_j^R}{\sigma}\right)^2} (P_j^D d_j g(k))$$



Overall Performance Metric

Progress

Carlos Padilla

Bellman's
equation

Task Execution
Model

**Overall
Performance
Metric**

Introduction

UML

Reward function's
schema

$$\xi = \sum_{j=1}^J \xi_j + \frac{\alpha}{N} \sum_{i=1}^N \left(\frac{E_i - E_L}{E_{max} - E_L} \right)$$



Design

Progress

Carlos Padilla

Bellman's
equation

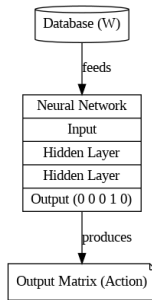
Task Execution
Model

Overall
Performance
Metric

Introduction

UML

Reward function's
schema





Reward function's schema

Progress

Carlos Padilla

Bellman's
equation

Task Execution
Model

Overall
Performance
Metric

Introduction

UML

Reward function's
schema

