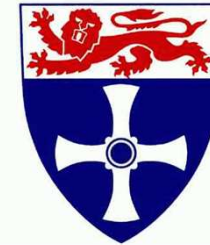




Universität Hamburg
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Horizon 2020
European Union funding
for Research & Innovation

UNIVERSITY OF
NEWCASTLE



STEP2DYNA

Newcastle Workshop (3)

@The Biscuit Factory, Newcastle, NE2 1AN UK

Project Acronym: STEP2DYNA – Project Number: 691154



Huazhong University of
Science and Technology



Basic Information

- Marie Skłodowska-Curie Actions (MSCA)
- Research and Innovation Staff Exchange (RISE)
- H2020-MSCA-RISE-2015

- Project Acronym: STEP2DYNA
- Project Number: 691154
- Project Period: 01/07/2016-30/06/2020
- Total budget: €1,008,000.00

Work Packages (WPs)

- WP1: Collision detection visual neural systems modelling
- WP2: Multiple visual neural systems coordination for robust collision detection
- WP3: Neuro-vision sensor design, simulation and testing
- WP4: Collision detection and avoidance systems for robots and UAVs
- WP5: Joint workshops, conference and dissemination
- WP6: Project management and market exploitation

Collaboration & Involvements

Table B1: List of Work Packages

| Work package no. | Work package title | <i>Beneficiary/Partner organisation short name</i> | Start month | End month |
|------------------|--|--|-------------|-----------|
| 1 | Collision detection visual neural system modelling | UoL, UNEW, KU, UBA, XJTU, TU | 01 | 48 |
| 2 | Multiple visual neural systems coordination for robust collision detection | XJTU, UoL, UHAM, UNEW | 01 | 48 |
| 3 | Robust neural vision chip design | TU, UHAM, UoL | 01 | 48 |
| 4 | Collision detection and avoidance systems for mobile robots and UAVs | UHAM, TU, UoL, XJTU | 01 | 48 |
| 5 | Joint workshops, conference and dissemination | All partners | 00 | 48 |
| 6 | Project management and exploitation | All partners | 00 | 48 |

Main activities in Numbers

- Staff secondments
 - 273 months of secondments (224 EU funded)
 - minimum secondment time is 1 month (added up)
 - max secondment time is 12 months (added up)
 - have detailed plan (see part A)
- 5 workshops
 - kick off workshop, done
 - Other 4 workshops
- 2 training seminars

Table B5. Deliverables List

| Deliverable No | Deliverable Name | Work Package No | Lead Participant Short Name | Nature | Dissemination Level ¹ | Delivery Month |
|----------------|--|-----------------|-----------------------------|--------|----------------------------------|----------------|
| D1.1 | Preliminary visual neural system models for collision cues extraction | 1 | UoL | | PU | 12 |
| D1.2 | Interim refined visual neural system models | 1 | UoL | | PU | 30 |
| D1.3 | Final visual neural system models | 1 | UoL | | PU | 46 |
| D2.1 | Visual neural systems integration for single cue extraction enhancements | 2 | XJTU | | PU | 18 |
| D2.2 | Multiple visual neural system integration via simulation | 2 | XJTU | | PU | 30 |
| D2.3 | Multiple visual neural system integration via robot developmental methods | 2 | XJTU | | PU | 46 |
| D3.1 | Identified visual neural systems for realization | 3 | TU | | PU | 12 |
| D3.2 | Neural vision chip structure identification | 3 | TU | | PU | 24 |
| D3.3 | Noise test and refine components | 3 | TU | | PU | 36 |
| D3.4 | Final report to describe the design and fabrication of the neural vision chips | 3 | TU | | CO | 46 |
| D4.1 | Implementation of visual neural systems to a robotic platform | 4 | UHAM | | PU | 14 |
| D4.2 | Preliminary demonstrator system for robust collision detection | 4 | UHAM | | PU | 28 |
| D4.3 | Refined demonstrator system against complex background | 4 | UHAM | | PU | 46 |
| D5.1 | Kick off workshop | 5 | UoL | | PU | 1 |
| D5.2 | Project website | 5 | UoL | | PU | 4 |
| D5.3 | The first and second training seminars | 5 | UoL | | PU | 22 |
| D5.4 | All the workshops have been delivered | 5 | UoL | | PU | 46 |
| D6.1 | Consortium agreement | 6 | UoL | | PU | 0 |
| D6.2 | Periodic technical and management report | 6 | UoL | | PU | 24 |
| D6.3 | Market exploitation plan and progress | 6 | UoL | | PU | 40 |
| D6.4 | Final technical and management report | 6 | UoL | | PU | 48 |

Table B6: List of Milestones

| List of milestones | | | | | |
|--------------------|---|-----|---|--------------------------|----------------|
| Milestone | Milestone name | WPs | Lead Beneficiary/ Partner organisation | Delivery date (M- month) | Comments |
| M.1 | Formation of the management board during contract negotiation | WP5 | UoL | Prior to project start | |
| M.2 | Kick off workshop | WP5 | UoL | M01 | |
| M.3 | Preliminary visual neural models | WP1 | UoL | M12 | Refined by M30 |
| M.4 | Multiple models integration | WP2 | XJTU | M24 | |
| M.5 | Neural vision chip structure & components refinement | WP3 | TU | M36 | |
| M.6 | The demonstrator system | WP4 | UHAM | M46 | |
| M.7 | Final technical and management report | WP6 | UoL | M48 | |

Management Structure

- The research management board
 - All PIs, chaired by SY
 - Meet at least once a year (incl. Skype meeting)
- Specific management responsibilities
 - Secondments, finances
 - Deliverables, synergies
 - Website, internal/external communications
 - Periodic reporting of progress/activities

Key indicator of success

- Planned research & outcomes (partners)
- Planned detailed secondments, workshops, and other networking events
- The total number of secondment months, are the key indicators through out of the project (REA)

Thanks

- 4th workshop & seminar
- Feb 2018
- In Hamburg?



Executive Agency

Research Executive Agency (REA)

Marie Skłodowska-Curie Research and Innovation Staff Exchanges



Questions/discussion