Data Engineering for Data Science
European Joint Doctorate

DEDS

Organisers

- ULB — UNIVERSITÉ LIBRE DE BRUXELLES
- UNIVERSITAT POLITÈCNICA DE CATALUNYA BARCELONATECH (UPC)
- AALBORG UNIVERSITET
- ATHENA' Research & Innovation Information Technologies

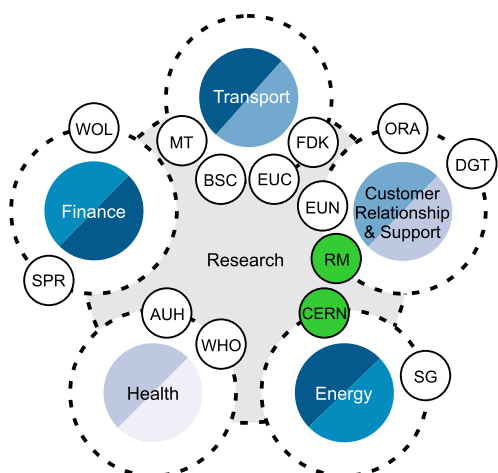## Why DEDS?

Data drives the world.

The DEDS programme will be a worldwide reference in advancing research and education in data management innovation for solving the critical challenges facing the society now and in the future.

Topics

Research Projects		ULB	UPC	AAU	ARC	Discipline	Functional Modules	
ESR1.1	Semantic-aware heterogeneity management		■			Customer	WP1 Governance	
ESR1.2	Traceability in big data processing		■	■		Health		
ESR1.3	Privacy-aware data integration		■		■	Health		
ESR2.1	Transparent in-situ data processing		■			Transport	WP2 Storage and Processing	
ESR2.2	Distribution and replication for feature selection		■			Customer		
ESR2.3	Model-based storage for time series			■		Energy		
ESR2.4	Analytic operators for trajectories	■				Transport		
ESR2.5	End-to-end optimisation for data science in the wild	■				Energy		
ESR2.6	Physical optimisation for large scale, DS workloads				■	Transport		
ESR3.1	Spatio-temporal data integration & analysis	■				Transport	WP3 Preparation	
ESR3.2	Synopses-driven data integration & federated learning				■	Finance		
ESR3.3	Unified information extraction for data preparation	■				Customer		
ESR4.1	Interactive exploration & analytics on complex big data				■	Customer	WP4 Analysis	
ESR4.2	Scalable model selection in stream settings		■			Finance		
ESR4.3	A platform for prescriptive analytics			■		Energy		

ESR - Early-Stage Researcher
WP - Work Package

- Main supervisor from the Home institution
- Co-supervisor from the Host Institution
- Use case disciplines

Partners

- ○ Secondment
- ● Secondment & Open Source Platform Leader

Volume | Velocity | Variety | Veracity | Privacy

SPR-Spring Techno; **WOL**-WorldLine; **MT**-MarineTraffic; **BSC**-Barcelona Supercomputing Center; **EUC**-Eurecat; **FDK**-FlexDanmark; **ORA**-Orange Belgium; **DGT**-Direcció General de Turisme; **EUN**-EuraNova; **RM**-RapidMiner; **CERN**-European Organization for Nuclear Research; **SG**-Siemens Gamesa; **WHO**-World Health Organization; **AUH**-Aalborg University Hospital;

Plan

	1st Semester	2nd Semester	3rd Semester	4th Semester	5th Semester	6th Semester
Research Mobility	Stay at Home Institution		Stay at Host Institution		Stay at Home Institution	
Doctoral Stage	State of the Art/ Workplan definition		Conception and Implementation		Evaluation and Writing	
Research and Training Programme	Doctoral Courses at Home Institution		Doctoral Courses at Host Institution		Doctoral Courses at Home Institution	
	Participation in Scientific Events / Secondments					
ESR Milestones	M1: Doctoral Project Plan	M2: Thesis Proposal Report	M3: Research Progress Report	M4: Doctoral Thesis Submission		
Joint Training Activities	Winter School	Summer School	Winter School	Summer School		

Dates

Application deadline: Feb 7, 2021, midnight AoE
Interviews: Mid of Feb 2021 - Mid of March 2021
Notification: End of March 2021