

7a.007.DU - Novel Methods for Data Integration and Information Extraction over Complex Heterogeneous Data

Project - Team

Team Member	Role	Email	Phone Number	Academic Sites/Industry Members
Yuan An	PI	anyuanay@gmail.com	(215) 895-2633	Drexel University
Siling Chen	Student	Not available	Not available	Drexel University
Matthew Marschall	Student	Not available	Not available	Drexel University
Nick Locantore	Project mentor	nicholas.w.locantore@gsk.com	Not available	Funded By: GlaxoSmithKline (GSK)
Matthew Allinder	Project mentor	Not available	Not available	Funded By: GlaxoSmithKline (GSK)

Project - Objectives

- Developing innovative big data approach for extracting, integrating, visualizing, and analyzing big data sets and for helping researchers gain knowledge from the large amount of data related to business, health care, and scientific research activities.
- In particular, investigating and developing data analytic methods for discovering and visualizing physical activity patterns for COPD patients in real-time digital monitoring data.

Project - Novelty of Approach

- To develop novel machine learning methods to discover relevant statements to enrich structured ontologies with linguistic evidence.
- To develop novel distance learning approaches for discovering the semantics of new data sources and for extracting proprietary entities and relations using enriched ontologies.
- To construct a graph knowledge base and develop efficient and effective methods for pattern discovery.

Project - Deliverables

	Deliverable
1	Analyzing and visualizing patient activity data for discovering patterns for individual and cohort patients
2	Linking the physical activity data with clinical data and applying advanced data mining methods for discovering any correlations between physical activities and clinical progressions
3	Publications in relevant scientific research conferences or journals.

Project - Benefits to IAB

- The project provides [innovative ontology-based algorithms and methods](#) for extracting concepts and complex relations from unstructured sources..
- The system helps researchers discover important patterns from big data sources and [connect dots](#) across the many data islands.
- Novel information extraction algorithms can be applied to many applications for question answering and knowledge discovery.

Project - Presentation Video (Spring 2018)

[Video Link \(5:20 minutes\)](#)

Attention Project PIs

PIs are responsible for keeping up the content of their project page and have the ability to EDIT the page.

- To **EDIT**, click the edit "pencil icon" in the top right-hand corner of this page
- To **PUBLISH** your changes, click the blue "Publish" button in the lower right-hand corner of this page
- If you need help or have questions, please contact Site Admin: Sally.Johnson@louisiana.edu

Table of Contents

- [Project - Team](#)
- [Project - Objectives](#)
- [Project - Novelty of Approach](#)
- [Project - Deliverables](#)
- [Project - Benefits to IAB](#)
- [Project - Presentation Video \(Spring 2018\)](#)
- [Project - Documents](#)
- [Project - Comments](#)

Spaces

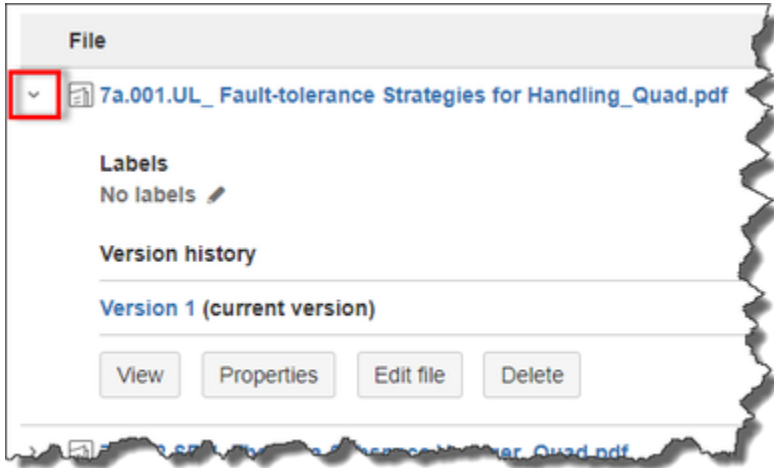
- All Spaces

	CVDI 2017 IAB Fall Meeting				
	CVDI 2018 IAB Fall Meeting				
	CVDI 2018 IAB Spring Meeting				
	CVDI 2019 IAB Fall Meeting				
	CVDI 2019 IAB Spring Meeting				
	CVDI Calendar				

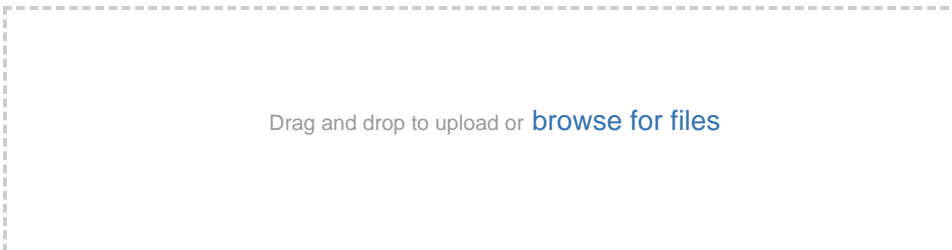
Project - Documents

For viewing/editing options, please click left arrow next to document name.

You will see different options depending on your access level.



File	Modified
> 7a.007.DU_Novel Methods for Data Integration_Quad_2017 Fall Meeting.pptx	Nov 15, 2017 by Sally Johnson
> Year 7_CVDI Executive Summary_7a.007.DU_YuanAn.docx	Feb 15, 2018 by Yuan An
> Year 7_CVDI Project Presentation PPT_7a.007.DU_YuanAn_narration.pptx	Feb 16, 2018 by Yuan An
> Year 7_CVDI Proposed Project_Drexel_Yuan_An_03092018.pptx	Mar 09, 2018 by Yuan An
> 7a.007.DU_Quad Chart_2018 Spring Meeting .pptx	Mar 15, 2018 by Sally Johnson
> 7a.007.DU_2018 Fall Meeting Poster.pptx	Nov 08, 2018 by Sally Johnson
> 7a.007.DU_Mid-Year Report.docx	Jan 14, 2019 by Sally Johnson



Download All

Project - Comments

	CVDI Leadership (All Sites)	+ ★ ☆
	CVDI Marketing Materials	+ ★ ☆
	CVDI Reports & Document Library	+ ★ ☆
	CVDI SITE (Drexel University)	+ ★ ☆
	CVDI SITE (Stony Brook University)	+ ★ ☆
	CVDI SITE (Tampere University)	+ ★ ☆
	CVDI SITE (University of Louisiana at Lafayette)	+ ★ ☆
	CVDI SITE (University of North Carolina at Charlotte)	+ ★ ☆
	CVDI SITE (University of Virginia)	+ ★ ☆
	IAB - Industry Advisory Board	+ ★ ☆
	Year 6 - Funded Projects (7/1/17 - 6/30/18)	+ ★ ☆
	Year 7 - Funded Projects (7/1/18 - 6/30/19)	+ ★ ☆
	Year 8 - Proposed Projects	+ ★ ☆

