

Thesis Timeline

Apr 5, 2022

Rensselaer Polytechnic Institute

<http://>

Project manager

Project dates

Oct 4, 2021 - Apr 7, 2023

Completion

40%

Tasks

47

Resources

0

Tasks

Name	Begin date	End date
Represent ST-Model Use Case components as clinical reasoning rules	10/4/21	12/28/21
Review Diabetes KB Use cases	10/4/21	10/29/21
<i>Diabetes abductive reasoning work by Julia and Martin does not actually include a KB</i>		
Weight gain Scenario Representation	10/14/21	11/8/21
<i>Start with this, show that the full workflow can be achieved with this example</i>		
Differential Diagnosis Representation	11/9/21	12/2/21
<i>Type 1 and Type 2 Diabetes</i>		
<i>Likely super simple at first</i>		
<i>Patient may have other comorbidities that have to be considered aside from diabetes (hints at the need to provide more of a differential)</i>		
Therapy Planning Representation	11/25/21	12/23/21
<i>Recommended treatment based on guidelines (for type 2)</i>		
<i>Will take a while to ingest all the ADA info</i>		
Plan Critiquing Representation Considerations	12/15/21	12/28/21
<i>Won't be able to test in scenario given to clinicians (won't be evaluated)</i>		
<i>Can consider but we won't test</i>		
<i>Describe components/aspects of the plan we are critiquing</i>		
Incorporation of Abductive Reasoner Agent	10/28/21	7/1/22
Determine method for specifying abductive query	10/28/21	11/18/21
<i>Complex AAA Abduction observation forms</i>		
<i>p: not(C1)</i>		
<i>p: and(C1,C2)</i>		
<i>p: or(C1,C2)</i>		
<i>p: some(R,C1)</i>		
<i>p: all(R,C1)</i>		
<i>Complex concepts: p: and(Patient, some(hasSymptom,S1))</i>		
Incorporate the use of the AAA reasoner on the subset of triples	11/15/21	12/6/21
Create converter from AAA reasoner output to a set of triples to be input back into the graph	12/6/21	12/30/21
Create nanopublication with triples include some form of provenance	1/3/22	2/18/22
Complete Abductive Reasoner Integration	2/22/22	4/29/22
Complete ST-Model-based Hybrid Reasoning	5/2/22	7/1/22
Demo of weight gain use case	11/19/21	12/16/21
Testing	1/3/22	8/12/22

Tasks

Name	Begin date	End date
Testing of Weight gain Scenario Representation	1/3/22	1/28/22
Clinical reasoning axiom deductive output validation	1/31/22	3/21/22
Abductive reasoning output validation	3/23/22	4/22/22
Testing of chaining between deductive and abductive components	4/25/22	6/13/22
Abductive triple population validation	6/15/22	7/15/22
Hybrid Reasoning Testing	7/18/22	8/12/22
Clinical UI Integration	2/1/22	9/1/22
Calendar Completion	2/1/22	3/8/22
Dashboard Setup	3/10/22	4/21/22
Reasoning Integration into UI	4/22/22	6/22/22
Alignment with Vue framework	6/23/22	7/29/22
Clinical UI Demo	8/1/22	9/1/22
Relevance evaluation	2/21/22	11/4/22
IRB Submission	2/21/22	5/12/22
Metrics and survey/Protocol creation	2/21/22	4/7/22
Scaffolding/chunks for testing	4/8/22	5/12/22
Consent documents	4/8/22	4/18/22
Software list/study instruments	4/8/22	4/19/22
Survey	4/8/22	5/12/22
Submitting IRB	5/13/22	5/23/22
Clinician search	5/13/22	8/4/22
Conduction of evaluation	8/5/22	11/4/22
Review/refinement	11/7/22	1/17/23
<i>Review programming and representation components</i> <i>Review feedback for UI as well as general comments from Clinicians</i> <i>Pilot UI before showing to clinicians so we are not wasting time on visuals</i>		
Review representation components	11/7/22	12/2/22

Tasks

Name	Begin date	End date
Review programming components	12/2/22	12/16/22
Review feedback for UI	12/7/22	12/30/22
<i>As well as general comments from Clinicians</i>		
Incorporate remaining feedback and refine integration	12/29/22	1/17/23
Disseration Completion	1/18/23	4/6/23
Thesis Updates	1/18/23	3/1/23
Thesis Defense Preparation	3/2/23	3/10/23
Thesis Defense	3/13/23	3/13/23
Thesis Submission	3/15/23	4/6/23

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Gantt Chart



