# Research Collaborator Recommendation using Hybrid Recommender System in Science Gateways through Conversational Agent

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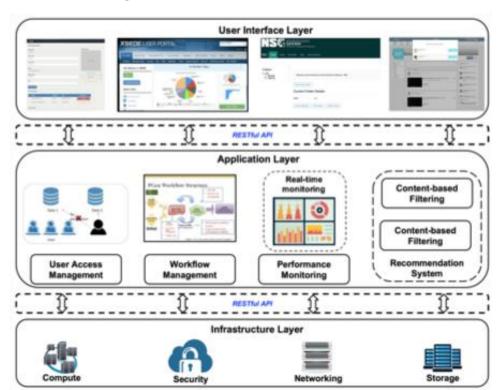
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### Agenda

- Science Gateway Introduction
- Research Community Growth Problem Formulation
- Our Proposed Solution

### Helping Domain Sciences use Cyberinfrastructure

- Science gateway (SG) is an online community space for science and engineering research and education
- SGs allow access to shared data, software, computing services, instruments, educational materials, and other resources specific to their disciplines

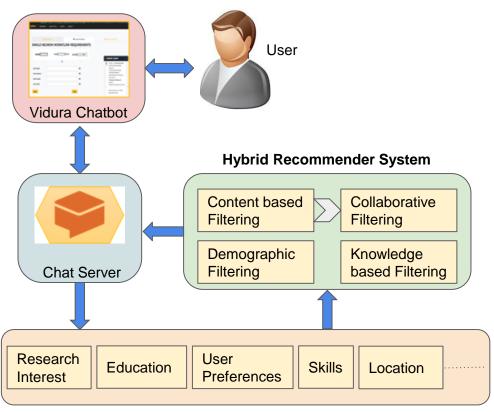


#### Problem Formulation: Researcher Community Growth

- The existing SGs do not foster the re-use of knowledge of prior users as part of the resource composition of future users
- Growth in research can be accelerated by recommending potential collaborators as a resource to researchers
- Considering the enormous user base in SG, finding individual with common research interest is difficult task without an expert
- There are many recommendation systems for collaboration discovery but there is scarce use of them in SGs

## Proposed Solution: Hybrid Recommendation System

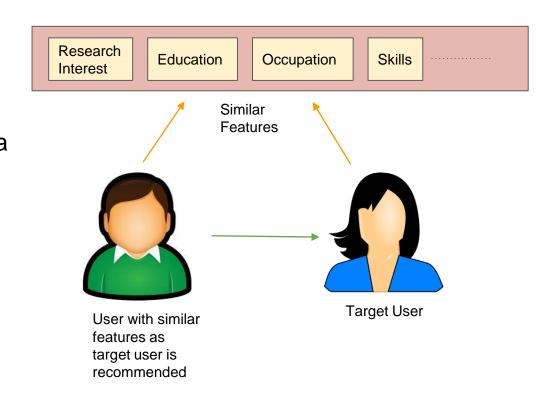
- We propose a novel Collaborator Recommendation System to recommend collaborators in Neuroscience Gateways using a conversational agent
- We developed 'Vidura' chatbot based on Google's Dialogflow



Source Data

#### contd...

- Data for our system is collected using chatbot
- Hybrid approach is used for recommendation system which is a combination of collaborative, content-based, demographic and knowledge based filtering
- Our recommender system helps users in building and maintaining strong research teams



# Thank You!

Questions?