

sdmay23-01: Knowledge Graphs for Cybersecurity Reasoning

Week 6 Report

October 28 - November 4

Team MembersBrandon Richards — *Frontend Development Lead*Micah Gwin — *Python/ML Development*Alice Cheatum — *Programmer/CYB E Knowledge*Nicklas Cahill — *Tester/Programmer*Michael Watkins — *Python/ML Development*Carter Kitelinger — *Client Interaction/CYB E Knowledge***Summary of Progress this Report**

- Nearly-complete implementation of scraper
- Article annotation complete
- Begun creating parser

Pending Issues

- How to perform NER in parser
- How to perform RE in parser

Plans for Upcoming Reporting Period

- Scraping – Track already-fetched articles
- Scraping – Add testing (unit, integration) (code coverage >75%)
- Scraping – Throw error if target HTML is not present
- Parser - Perform very basic NER on input from scraper
- Parser – Define expected input and output cases for testing

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Brandon Richards	Wrote scraper code to scrape sources from sourcelist, added parser specification to sourcelist, perform homepage and article parsing, output article text for parser.	6	
Micah Gwin	Helped expand scraper functionality to find links and articles on the main page and scrape them as well. Began planning parser strategy for cleaning up articles and placing in database.	4	
Alice Cheatum	Annotated articles for machine learning, met with client.	2.5	

Nicklas Cahill	Annotated and Prepared articles for NER and RE.	2	
Michael Watkins	Wrote a MongoDB driver in Python for scraper and parser to utilize.	3	
Carter Kitelinger	Met with client, annotated articles for the machine learning program to begin learning from.	2.5	

Gitlab Activity Summary

Nothing to report.
