**Nicholas Konovalenko**

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(989)-225-4229 C++, Java, Power Shell

**EDUCATION:**

Bachelor of Science in Engineering, Computer Science December 2021

University of Michigan - College of Engineering, Ann Arbor, MI

International Baccalaureate Diploma May 2018

Herbert Henry Dow High School, Midland, MI

GPA: 4.6 / 4.0

**RELATED EXPERIENCE:**

Technical Services Intern – Frankenmuth Insurance, Frankenmuth MI May – August 2019

* Created 20,000+ relationships between Active Directory Agencies and their members in Service Now using Power Shell
* Collaborated with Security Team to automate malicious URL incident creation in Service Now using Java Script
* Reduced the run time of the script from 72 hours to 10 minutes by implementing a hash set instead of a vector
* Improved Incident SLA breach notification accuracy to 100% by reducing work flow code duplication by 80%
* Consolidated 8 C# task killing applications into 1 Power Shell Application rolled out company-wide

Web Developer Intern - Michigan Chess Association, Lansing MI September 2017 – September 2018

* Remodeled website to be more user-friendly; viewable at www.michess.org
* Created a JavaScript applet that calculates a team’s average rating based on user inputs

**PROJECTS:**

(**Python**) Career Scraper – Personal Project (In Progress) September 2019

* Developed a Python script that imports the titles, scores, and bodies of the top 500 threads in to a CSV.
* Applying Python Natural Language Toolkit to perform sentiment analysis on the subreddit threads.
* Visualizing the data to view a ranking of internships from most positive to most neutral sentiment.

(**C++**) Piazza Post Machine Learning – EECS 280 May 2019

* Used natural language processing and machine learning to identify the subject of EECS 280 Piazza posts
* Implemented a Binary Search Tree and Map ADT for a Multi-Variate Bernoulli Naïve Bayes Classifier algorithm
* Trained a machine on 11,000+ posts to classify 3,000 posts with 90% accuracy using the algorithm mentioned above

(**C++**) Zero Day Security Competition – Michigan Hackers April 2019

* Developed vulnerable HTML pages and encrypted flags for challenges
* Aided with competition branding and advertising
* Executed the campus-wide competition, while working with teammates to quickly solve unexpected technical issues
* Developed an onboarding process for new members to learn about security while joining the team

(**Java**) Strategic Zombie Survival – Personal Project July 2018

* Developed a 2-Dimensional Zombie survival game with data structures to represent the player and enemies
* Created enemies with a simple artificial intelligence algorithm based on the player’s current location
* Implemented local version control to ensure code changes would not result in lost progress

**RELEVANT COURSEWORK:**

EECS 281 – Data Structures and Algorithms December 2019

* Applied dynamic memory management in C++ to implement unit testing frameworks for debugging
* Implemented a deque to create a treasure map, for a location finding algorithm
* Learned about hash tables, search trees, search algorithms, and divide and conquer strategy.

**TECHNICAL SKILLS:**

Programming: C++, Java,Power Shell, MATLAB, Java Script

Skills: GNU Core Utilities, Git Version Control, Valgrind

Foreign Languages: French, Russian

Areas of Interest: Machine Learning, Artificial Intelligence, Information & Web Security

**ACTIVITIES AND ACADEMIC AWARDS:**

Completed Google FooBar Challenge June 2019 – September 2019

Residential Advisor for Mary Markley Hall August 2019 – Present

Security Core Lead of Michigan Hackers April 2019 – Present

Security Core Team Member of Michigan Hackers September 2018 – Present

University of Michigan Chess Team September 2018 – Present

College of Engineering Dean’s List September 2018 – Present