KONSTANTIN KOVALCHUK

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EDUCATION

University of Michigan *Ann Arbor, MI*
B.S.E Honors in Computer Science *September 2018 - Present*
GPA: 3.67 Expected Graduation Date: May, 2022
Relevant Coursework: EECS482 (Intro Operational Systems), EECS281 (Algorithms and Data Structures), EECS370 (Computer Organisation), EECS376 (Foundations in Computer Science), EECS215 (Electronic Circuits), EECS270 (Intro Logic Design).

EXPERIENCE

Information and Technology Services *Ann Arbor, Michigan*
Software Intern *May 2020 - August 2020*

- Designed and Implemented Ansible Roles, Playbooks, and Inventories to automate and provision machines for WiFi Testing System using Vagrant environments
- Executed and debugged installation for the ELK stack, Perfsonar network testing software, and RabbitMQ on Ubuntu Raspberry Pi testpoints and Centos Central Processing server
- Applied Creative thinking to find working solutions for setting up several message pipelines to take our network-scan and Perfsonar testing data through Logstash filters and display it in Kibana

ISUZU MDP Powertrain Team *Ann Arbor, Michigan*
Software SubTeam *January 2020 - Present*

- Did research on engine emissions modeling using Machine Learning techniques.
- Programmed and trained several Machine Learning models (ELM, SVM, etc) to compare efficiency for engine emissions calculation.
- Developed skills using Python Scikit Packages and Jupyter notebook environment.

SKILLS

- **C++:** OOP, Smart pointers, Memory management, STL, Heaps, PQs, Binary Trees, Arrays, Loops, Abstract Data Types, Testing, Debugging, Pointers, Stacks, Ring Buffers, Structured Programming, File Handling.
- **Unix like Systems:** System administration for Centos/Debian/Ubuntu installations. Packet installation with apt/yum/rpm managers. Program and network debugging through various logs.
- **Vagrant:** Creating easily modifiable VirtualBox Unix environments with multiple machines for software development and debugging.
- **Ansible:** Working with various Ansible playbooks and inventories. Writing roles for specific machines. Developing and setting controllable multi-machine environments.
- **ELK stack:** Implementation and configuration of Elasticsearch, Logstash, Kibana with RabbitMQ clusters for multiple-source data gathering, processing and displaying using several pipelines.
- **Python:** OOP, Pika module, Arrays, Sets, Inheritance, Loops, Sequences, Linear Search, Binary Search, Recursive Algorithms, JSON module, File Handling, Debugging, Testing.
- **Version control:** Working collaboratively on the team project using GitHub workflow. Working with third party open source software packages. Contributing new code back to the community.