# KONSTANTIN KOVALCHUK

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#### **EDUCATION**

University of Michigan **B.S.E Honors in Computer Science**  Ann Arbor, MI

September 2018 - Present

GPA: 3.7

Expected Graduation Date: May, 2022

Completed Coursework: Distributed Systems(Golang), Operating Systems(C++), Web Systems(Python, JavaScript), Data Structures and Algorithms (C/C++), Computer Organisation, Software Engineering.

Currently taking: Computer Networks, Parallel Computing, Mobile Development.

### **EXPERIENCE**

## **Filos** Founding Engineer

Ann Arbor, Michigan June 2021 - Present

- Developed a Node is API server to retrieve market data from public iexCloud API with DynamoDB caching to reduce outgoing requests by over 65% and provide faster responses to mobile clients and the main server.
- Architected, built, and deployed scalable main business logic server using FastAPI to process thousands of requests from the client application and to use Amazon RDS database storage executing internal operations.
- Worked with a team to design and code the phone application using TypeScript allowing users to enter or create challenges and compete with their friends or strangers on the stock market for a monetary prize.

# Barclays Technology Intern

Whippany, New Jersey June 2021 - August 2021

- Learned the architecture and programming principles of Hadoop, Spark, Hive, and Kafka used in the bank to support and debug bank's backend running jobs.
- Monitored the ongoing operations through the IBM Workload Scheduler to report upcoming errors on company's Cloudera platform to the support group and provide quicker failure resolution.
- Created Hive queries necessary to build dashboards and analysed the data along with Hadoop job source code to pinpoint the cause reoccurring issues in the job chain execution.

# Information and Technology Services Software Engineering Intern

Ann Arbor, Michigan May 2020 - August 2020

- Designed and Implemented Ansible Roles, Playbooks, and Inventories automating provisioning and deployment for over 12 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
- Set up several working message pipelines to take our network-scan and Perfsonar testing data through Logstash filters and display it in Kibana creating a convenient way to analyze WiFi performance and to query database

# ISUZU MDP Powertrain Team Software Engineer

Ann Arbor, Michigan January 2020 - December 2020

- Developed and incorporated Machine Learning models (ELM, SVM, etc) into ISUZU Matlab simulation toolbox allowing making accurate predictions up to 0.92 without expensive real testing
- Self-taught working with Python Scikit libraries and further developed other Python ML related skills in a Jupyter notebook environment.
- Collaborated with a Multidisciplinary team to Research the best emissions simulation models and implemented the solution lowering costs for the commercial testing by over 70%.