### Vitalii Kovtounenko

## vitalykovtunenko92@gmail.com

#### **Education:**

## Purdue University, Bachelor of Science in Computer Science – West Lafayette, IN

05/2021

• Relevant Coursework - Data Structures and Algorithms, Computer Architecture, Systems Programming Software Engineering, Software Testing, Operating Systems, Data Mining & ML, Cloud Computing

GPA: 3.31/4.0

GPA: 3.94/4.0

• Certificate of Entrepreneurship

Prairie State College, Associate of Science - Chicago Heights, IL

05/2018

#### **Skills:**

#### Technical:

- Java, C/C++, Python
- Familiar with: AWS, Docker, Kubernetes, Assembly, Unix/Linux, HTML, CSS, JavaScript, Node.js, React.js, Firebase, MySQL Languages:
  - Fluency in English, Hebrew, and Russian

#### **Projects:**

#### HopScotch (group):

- Created a web application that centralize all aspects of trip planning like flights, hotels, attraction and dining
- Compiled many third-party services into one search
- Implemented RESTful API using node.js and used MySQL database to take advantage of intertwined relations in data
- Worked with react on the client side which allowed easy customization of UI

#### Cloud services (Individual):

- Implemented three microservices using docker and python; storage service to store objects into S3 bucket on AWS, web service to accept RESTful queries and upload/download files, and compression service to compress/decompress files
- Achieved communication between microservices by using RESTful queries
- Managed containerized microservices using Kubernetes

## Decision Tree Classifier (Individual):

- Implemented an ID3 algorithm in Python to predict who will survive and die in the Titanic dataset
- Incorporated k-fold cross validation, minimum sample split size, maximum depth, and post pruning to reduce overfitting and generalize better for unseen data
- Achieved 86% prediction accuracy by defining the maximum depth of the decision tree

#### Web Server (Individual):

- Created HTTP and HTTPS webserver with three concurrency modes: fork, thread, and pool of threads using C/C++
- Learned multithreading programming

## **Other Experience:**

#### Equipment Center/Entry Control - Purdue Recreational and Wellness Center

05/2019 - 05/2021

- Primary contact for patrons entering the facility or renting equipment
- Enforcing the University I.D. policy and making sure restricted individuals do not enter the facility

# Security Supervisor – Waldorf Astoria Hotel, Jerusalem

09/2014 - 07/2016

- Provided security for hotel and guests, protecting against terror attacks and fires
- Served as a first responder to numerous medical issues that occurred with guests and employees
- Treated wounds, injuries, and provided immediate care

# Military – Israel Defense Forces (IDF), Sergeant

08/2011 - 08/2014

- Served in the infantry as an Explosive Ordnance Disposal specialist
- Specialized in setting and detonating explosives and mines; created safe paths for other forces to cross enemy lines
- Cleaned landmines to transform the land into agricultural land

#### Leadership:

- Mentor Tutored math courses including Calculus II and Linear Algebra at Prairie State College
- Student Government Association at Prairie State College Served as a Secretary and Treasurer