# Nikoleta Koleva

Phone: (917) 553-4544 | E-mail: kolevn@rpi.edu | Portfolio: nvkoleva.github.io

## **SKILLS**

Languages: C++, Java, Python, C#, C, JavaScript, HTML/CSS, SQL, VHDL, Arduino

Frameworks: React, Redux, Node, .Net, Bootstrap, Git

**Embedded:** Quartus II, Cadence IC Design, LogicWorks, Raspberry Pi, Keysight Oscilloscope

**Database:** Oracle, SQL Server, MySQL, PostgreSQL, Hadoop, Tableu, PowerBI **Other:** Agile Development, JIRA, Microsoft Azure, Project Management

## **EXPERIENCE**

## **Software Engineering Intern: DEUTSCHE BANK** – Virtual –July 2020

- Implemented a COVID-19 machine learning predictor based on household income and population density, using Azure, Python, and Random Forest Regressions through scikit-learn
- Developed a mock Instant Payments platform using Python, ReactJS, and MySQL to simulate expected benefits over traditional payment methods
- Participated in stand-up and sprint meetings to experience how Market Risk team handles simultaneously using multiple technologies effectively

## **Software Engineering Intern: UBS** – Weehawken, NJ – June 2019 to August 2019

- Winner of UBS Summer Intern Challenge 2019 for researching and testing multi-language tool to detect red flags and non-compliant communications with flagged instances on the cloud, using Hadoop Clusters, and Azure
- Implemented web application using Java, C#, .NET, jQuery, JavaScript, and Visual Studio, dealing with calculations and early termination fees within the Investment Bank
- Communicated with business-side and resolved long-standing critical issues, such as dynamic and accurate multiple language translation, using C# pattern algorithms
- Utilized agile development cycle, using Jira, Confluence, and Git, and participated in daily international stand-up meetings and feature releases

#### **Software Engineering Intern: UBS** – Weehawken, NJ – June 2018 to August 2018

- UI development, using JavaScript, React, and Redux, including finding and debugging defects, as well as building features on web application
- Back-end development, using Java, for communication with Oracle databases and UI integration
- Researched and implemented SchemaSpy to connect with Oracle database and display schema and entity-relationship diagram visualizations, through command-line arguments
- Integrated ESLint linting tool for ensuring code follows same conventions throughout code-base is more easily navigable
- Built randomizing networking application as lead-developer on intern project and presented in front of executive directors

#### **EDUCATION**

# **B.S in Computer & Systems Engineering: RENSSELAER POLYTECHNIC INSTITUTE (RPI)** Troy, NY – Dec 2020

- Relevant Coursework: Data Structures & Algorithms, Computer Hardware Design, VLSI Design, Computer Architecture, Networks & Operating Systems, Computer Components and Operations, Signals & Systems
- Involvement: RPISEC & IntroSEC, Rensselaer Electric Vehicle, RPI Tae Kwon Do, Slavic Student Association

#### NOTABLE RECENT PROJECTS

<u>UART RAM Transmission with FPGA</u>
3-input Logic Gate Design and Transient Response
Communication Red Flag System for UBS
Portfolio Git Page

Quartus II Cadence IC, Virtuoso C#/.NET, Hadoop HTML/CSS, JavaScript