KEVIN HOFFMAN

Software Engineer

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(215) 970-4839
Collegeville, PA
LinkedIn

SKILLS

Java
Python
C++
R
Javascript (Node.js, jQuery)
HTML5/CSS
AWS (Textract, Lambda, S3, DynamoDB)
Git
Agile Methodology
Scrum Framework

EDUCATION

B.S. Computer Science

expected May 2023

Ursinus College

August 2019 - current
Collegeville, PA
GPA: 3.98

Dean's List, August 2019-Present

The Faculty Prize for a Promising Sophomore in Computer Science, May 2021

RELEVANT COURSES

Artificial Intelligence (Python, JavaScript)
Software Engineering (Java, HTML5/CSS, JavaScript/Node.js)
Applied Regression Models (R)
Theory Computation (Java)
Object-Oriented Programming (C++, Java)

WORK EXPERIENCE

Machine Learning and Data Analytics Intern

Verif-y, Inc.

June 2021 - September 2021 Philadelphia, PA

- Designed and implemented software in Python that used learning algorithms to extract particular features (names, graduation year, GPA, and school name) from college transcripts. Met accuracy goals despite varied transcript formats.
- Automated academic transcript text extraction process via AWS Textract to reduce time spent on analyzing 1,000 transcripts from 5 hours to 45 minutes.
- Tested Python NLP libraries (NLTK, SpaCy) to incorporate named-entity recognition to identify student names, dates, and institution names.
- Streamlined extraction process by designing AWS pipeline to complete data storage in half the time.
- Tested software for bugs and operating speed. Corrected deficiencies and documented processes for future maintenance.

Research Assistant

Drexel University

September 2020 - current Philadelphia, PA

- Led a team of 4 in implementing, documenting, and testing new antenna driver software to gain 20% more data resolution.
- Provided proof of concept for novel RFID localization algorithm that improves the pre-existing algorithm's operating speed by 30%.
- Facilitated experimental analysis of RFID localization in a controlled environment with varying distances and angles of localizable objects to determine accuracy and variance of subjected localization algorithm.
- Designed and programmed visualizer to analyze the changes that occur to a network of WiFi access points' signal strengths over time.

PROJECTS

Generalizing OLS Regression Models

Co-Researcher for Ursinus College Department of Mathematics

October 2019 - May 2021

- Expanded Ordinary Least Squares (OLS) Regression equations to occupy arbitrary Lp spaces.
- Simulated OLS performance across varying Lp spaces and error term distributions for 2,000 trials.
- Presented results alongside 16 other students at the Electronic Undergraduate Statistics Research Conference.

Parking Garage Software

Scrum Master & Developer

September 2021 - December 2021

- Served as Scrum Master for team of 4 developers to keep track of progress made on user stories during biweekly sprints.
- Programmed Web API using Node.js to process user requests at parking garage.
- Designed and implemented GUI using HTML5, CSS3, and JavaScript to allow user to access short-term and long-term parking options.
- Co-implemented web request framework for Java middleware processing unit. This program processed short-term client check-in and check-out functionalities as well as long-term client account registration functionalities.