Taylor Cox

Greater New York Metropolitan Area (Open to Relocation)

taylor@coxintl.com | (732) 939-6649

EDUCATION

Worcester Polytechnic Institute (WPI), Worcester, MA   Dec. 2022

Bachelor of Science, Computer Science, GPA 3.5 / 4.0

Dean's List   Semester 1 2018, 2019

Bachelor's Degree with Distinction   Dec. 2022

Relevant Courses:

5000-level: Computer Networks, Database Systems I & II, Webware – Web Applications

4000-level: Human-Computer Interaction, Software Engineering, Student Research

SKILLS

Programming Languages/Databases: Python, HTML/CSS/JavaScript, React.js, jQuery, Java, C, PostgreSQL, MongoDB

Operating Systems: Debian / Ubuntu Linux, Windows 7/10/11, Docker

Software: VSCode, Figma, LucidChart, Postman, pgAdmin, Microsoft Office, Google Workspace, Todoist

EXPERIENCE

IT Technician / Software Developer (Part-Time), Aquatecture, Point Pleasant Beach, NJ   August 2023 - Present
  - Implementing systems for backup, file sharing, and software tools for project creation and overhead calculations for family business.
  - Managing pfSense firewall for geo-IP blocking and blocking malicious websites.

Student Research Assistant – Thesis Work, ASSISTments, Worcester, Massachusetts   May '21 - Aug. '21
  - Managed teams with 3 members on Affect and BKT services.   May '22 – Aug. '22
  - Designed scalable and robust software for production.
  - Developed software in line with existing ASSISTments programming practices.

IT Technician (Freelance), eSki, Worcester, Massachusetts   Jan. 2022 - Mar. 2022
  - Designed and posted WordPress website for accepting pre-orders.
  - Developed temperature chamber control script for BMS component testing.

PROJECTS

CatanAI (WIP), Personal Project, Point Pleasant Beach, NJ   August 2023 - Present
  - Developing Java Spring Boot backend to model Catan games, communicating with React.js game viewer over REST API calls and PyTorch PPO model over web sockets.
  - Utilizing personal Debian Linux hypervisor for development and testing.

Bayesian Knowledge Tracing (BKT) Service, ASSISTments, Worcester, Massachusetts   May 2022 – Sep. 2022
  - Designed and developed REST API for generating and efficiently retrieving skill mastery information.

Affect API Service, ASSISTments, Worcester, Massachusetts   May 2021 - Aug. 2021
  - Created machine learning REST API to detect student affective states, with UI to compare AI models.

LIVE-CHART, ASSISTments, Worcester, Massachusetts   May 2021 - Aug. 2021
  - Revitalized web application designed to view in-class student assessment activity.
  - Optimized front and back-end operations to enhance performance.
  - Implemented real-time communication between question-answering service and LIVE-CHART.

Technologies Used for Projects include:

Java Spring Boot, Python (Flack, pyBKT, TensorFlow), PostgreSQL, Docker, React.js

ACTIVITIES / LEADERSHIP

Vice President, Recruitment Chair, Communications Chair, Finance Chair   Aug. 2019 - Mar. 2022

Elected Positions in Beta Theta Pi Fraternity, Worcester, Massachusetts

Cyber-Security Club Member   Aug. 2018 - May 2022

Worcester Polytechnic Institute, Worcester, Massachusetts