Patrick Cox

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https://patrick.yox.dev

EXPERIENCE

FULL-STACK DEVELOPER
| Intelligent Digital Systems, Inc.
Jan 2019 - Present | Newport News, VA

- Developed multiple client and server applications written in **ReactJS**, **C++**, **C#**, **Java**, and **Python** with **SQL Server** database connections.
- Designed and implemented the overall architecture for multiple components of a data analysis and exploration platform deployed on Microsoft **Azure**.
- Integrated Azure Directory Federation Services 2016 in multiple user-facing and server applications.
- As part of the data science team, implemented machine learned models for text classification, learning to rank, and recommender systems.
- Created a learning-to-rank application in **C++** with the **C++ REST SDK** which conducted preprocessing, machine-learned ranking, and postprocessing to sort search results according to relevance and user metrics.

RESEARCH ASSISTANT
| ODU Vision Lab
April 2017 – Dec 2018 | Norfolk, VA

- Assisted research and project development in computer vision, machine learning, and image processing for next generation applications in biomedical and machine-centric recognition.
- Established the laboratory's **Git** version control system using **GitHub** and educated Vision Lab members on best standards and practices.
- Participated in numerous laboratory demonstrations to academic, military, and government representatives such as the Virginia Secretary of State.

SUMMER GAMES INTERN
| Booz Allen Hamilton
June 2017 - Aug 2017 | Norfolk, VA

- Collaborated with a diversely skilled team of six interns to conceptualize, design, develop, and present a novel proof-of-concept application to company leadership for assessment and consideration for continued development.
- Presented the team's project in a competition against over 450 collegiate level interns divided into 75 teams at the annual Booz Allen Summer Games Challenge Cup and placed third overall.
- Created a web application in **C** and **AngularJS** with **SQL** database which met HIPAA privacy requirements and ADA compliance.

RESEARCH

ODU VISION LAB
| Research Assistant
April 2017 - Dec 2019 | Norfolk, VA
Worked with undergraduate and PhD students to create novel computer vision algorithms for multiclass brain tumor segmentation and near real-time multiperson tracking, identification, and state detection from 3D-LIDAR video.

EDUCATION

OLD DOMINION UNIVERSITY
BS in Computer Science
Minor in Military Leadership
Dec 2018 | Norfolk, VA

TECHNICAL SKILLS

PROGRAMMING
Proficient:
C++ • C# • Java • Python
Familiar:
JavaScript • SQL • Bash
Novice:
HTML/CSS • PHP • MATLAB • R • LaTeX

TECHNOLOGY
Git/Github • CMake • Maven
Docker • Azure • Entity Framework Core
AI • Computer Vision • Text Analytics

SOCIETIES

NATIONAL
Association for Computing Machinery
Inst. of Electrical and Electorics Engineers
National Eagle Scout Association
Order of the Arrow Brotherhood

OLD DOMINION UNIVERSITY
ODU ACM Chapter
Hackathon Committee
Cyber Security Association
Webmaster
Drone Club
Webmaster
Running Club
President

LINKS

Github:// **paddy74**
LinkedIn:// **patyx**
StackOverflow:// **patyx**