

WILLIAM ROWE

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EDUCATION

Washington University in St. Louis, McKelvey School of Engineering

St. Louis, Missouri

Bachelor of Science in Computer Science + Mathematics, Second major in Political Science

May 2023

Honors: CSE 2021 Outstanding Junior, Dean's List All Eligible Semesters

GPA: 3.97/4.00

Relevant Coursework: Machine Learning, Quantum Computing, Biosequence Algorithms, Rapid Prototype Development, Analysis of Algorithms, Computer Security, Computer Engineering, Linear & Matrix Algebra, Graph Theory, Statistics, Data Science.

RELEVANT EXPERIENCE

Capital One

McLean, Virginia

Software Engineering Intern

June 2022 – August 2022

- Collaborated with team to build an automated API testing tool incorporated into a feedback loop of consumer requests.
- Empowered API owners to configure rules regarding API request/response pair content and structure to capture unique API behaviors increasing code test coverage, and furthering the goal of faster and safer code deployment for all company Java APIs.
- Implemented prototype tool using Java Virtual Agents, AWS Lambda, DynamoDB, SQS, SNS into CI/CD pipeline processes.

Washington University in St. Louis, McKelvey School of Engineering

St. Louis, Missouri

Course Developer and Head TA - Intro to Quantum Computing

May 2021 – May 2022

- Proofread and reviewed 30 lecture slide decks in collaboration with instructor to ensure correctness and cohesion.
- Developed six IBM Qiskit programming assignments in Jupyter Notebook and integrated assignments with Otter software as well as Gradescope platform to automate grading, saving significant grading time and increasing grading consistency.
- Created eight written homework assignments and solution manuals, increasing engagement and comprehension for 80-student class.

National Security Innovation Network

O'Fallon, Illinois

X-Force Fellow

June 2021 – August 2021

- Partnered with Scott Air Force Base to design, test, and build a procedural cockpit trainer for updated C-21 aircraft avionics.
- Created three-dimensional model of cockpit for virtual reality implementation using Blender and X-Plane software.
- Built traditional physical simulator using 3D printed materials and Arduino Nano technology.

Saturday Neighborhood Health Clinic

St. Louis, Missouri

Web Developer

September 2020 – July 2021

- Worked in a student-led team to develop open-source Electronic Medical Record software in Django and participated in monthly standup meetings to coordinate development and report progress.
- Implemented REST API using Django REST framework to increase control and manipulation of database access and transitioned front end from Django templates to React.js to provide more customizable user interfaces.

LEADERSHIP & ACTIVITIES

Tau Beta Pi, Engineering Honor Society

St. Louis, Missouri

Vice President

January 2022 – Present

- Managed initiation, recruitment, and finances for 50-person club as well as attended training sessions to advance professional skills.
- Hosted industry leader event and enabled society members to gain valuable advice and insight from industry insiders.

Washington University, College of Arts & Sciences

St. Louis, Missouri

Research Assistant

October 2022 - Present

- Developed Python scrapers to obtain world leader data from CIA documents and compiled, sanitized, and sorted information.
- Utilized various web APIs to obtain gender of world leaders and additional data of interest regarding country-level COVID-related outcomes to Investigated correlation between country leader's gender and effectiveness of COVID-19 response.

Washington University, McKelvey School of Engineering

St. Louis, Missouri

Head TA - Data Structures & Algorithms; TA - Computer Security I

January 2020 – Present

- Managed 60 TAs and ran course infrastructure (GitHub Classroom, Gradescope autograders) for a 400-student class.
- Served as grading lead for lab assignments, coordinated undergraduate graders, held office hours, and graded exams.

SKILLS & INTERESTS

Programming: Java, JavaScript, React.js, C++, PHP. | **Data Management:** Python, SQL, R, Django REST, Google Firebase, MATLAB.

Other Skills: AWS Cloud Services, IBM Qiskit, LaTeX. | **Interests:** Computer Science Education, Patent Law, F1, Seattle Seahawks.