Polina Valiakhmetova

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EDUCATION

Toronto Metropolitan University   Sep. 2019 – April 2024
Bachelor of Computer Engineering (GPA: 3.8)

- Courses: Data Structures and Algorithms, Object Oriented Analysis Design, Computer Organization and Architecture, Distributed Cloud Computing, Digital Systems, Computer Networks, Intelligent Systems

TECHNICAL SKILLS

Languages: Python, Java, C, C++, Bash, JavaScript, HTML, CSS, MATLAB, SQL
Tools/Technologies: Git/Github, Linux, Django, Vim, Figma, AWS, Docker
Libraries/Frameworks: Scikit-learn, ReactJS, NodeJs, Pandas, JUnit, TensorFlow, OpenCV

EMPLOYMENT

Tenstorrent (ML Processor Company)   May 2022 – Aug. 2023
Systems Engineer (Python, Shell Scripting, C)

- Developed and implemented robust automation frameworks to optimize post-silicon verification for Voltage-Frequency(VF) curves, enhancing efficiency and accuracy by **35%** and reducing verification time by **25%**
- Executed comprehensive testing and verification of VF curves for **over 50** unique processors, ensuring compliance with industry standards and performance criteria
- Extracted and parsed VF data, to benchmark and analyze performance optimizations for key machine learning algorithms across the hardware and software stack
- Collaborated effectively within a small interdisciplinary team to conduct power measurements and characterization for ML processors and successfully onboarded and mentored **5** junior team members, improving the team's operational efficiency by **20%**.

PROJECTS

AI-Driven Job Recommending System | *Scikit-learn, Python, Django*   Sep. 2023 – Present

- Designed a hybrid ML model incorporating advanced tokenization and vectorization techniques on LinkedIn and resume web-scraped data and leveraging **pandas** for data manipulation and preprocessing
- Employed a modular approach in design and testing, with robust API endpoints in **Django**, integrating with a **MySQL** database data management, ensuring seamless integration of software components

Reservify: Interactive Restaurant Booking WebApp | *React, Django, Git*   Sep. 2023 – Dec. 2023

- Managed a 6-member software team as the Team Lead to develop a user-friendly **React-based** web application for reserving a restaurant, emphasizing Scrum methodology for effective collaboration
- Optimized scalability and performance, accommodating increased user traffic and enhancing system responsiveness

Emotion Processing and Analysis | *Tensorflow, Python*   Sep. 2023 – Dec. 2023

- Trained two convolutional neural networks, leveraging Kaggle datasets of over **30,000** images, to refine and optimize image-based emotion recognition algorithms resulting in accuracy rates of **71.8%** and **73.2%**
- Conducted advanced image processing using **Python**, employing techniques like histogram equalization and utilized **Matplotlib** for the enhanced visualization and normalization

Pathfinding Algorithm Visualizer | *JavaScript, CSS*   Jul. 2023 – Aug. 2023

- Engineered and open-sourced an interactive application visualizing Dijkstra's and A* Search Algorithms, enhancing user understanding of complex algorithms

RELEVANT EXPERIENCE

Metropolitan Engineering Competition   Jan 2024

- Placed in **top 3** by building a pill dispenser, demonstrating proficiency in Arduino programming, circuit design, and hardware integration

IEEE Computer Science Workshop Facilitator   Nov 2023

- Led a workshop on Git version control system for over **100 attendees** on Git fundamentals, branching strategies, and collaborative workflows