Syed Zain Raza

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EDUCATION

B.S. Applied Computer Science

Dominican University of California, 2019 - 2021

• Accelerated 2.5-year program involving **project-based learning** in software engineering and AI/ML.

EXPERIENCE

Research Engineering Intern (TensorFlow, AWS)

IQ3Connect Inc., Jan. 2022 - present

- Developing a novel storage solution for **3D web graphics** by utilizing **machine learning techniques**, with the goal of **90% reduction** of memory needed for real-time rendering on mobile displays.
- Conducted a benchmark of several radiance field algorithms that resulted in **time saved** in data collection and **10X speedup of model training**, and wrote custom Python/shell scripts to automate this process.

Teaching Assistant (TensorFlow, FastAPI, **Docker**)

Dominican University of California, Aug - Dec 2021

- Supported 20+ students in an upper-level **deep learning** course, by co-authoring <u>walkthrough lessons</u> and writing <u>starter code</u>; enabled 100% student pass rate by **overcoming major roadblocks** that arose in-semester.
- Revised and open-sourced <u>30 Python exercises</u> for a professor's upcoming textbook on Data Science.

PLM Software Development Intern, R&D (Java, Linux, Angular)

PTC, June 2021-Aug 2021

- Developed a platform-independent error handling message for Windchill, so that the team could focus on implementing next-generation features for the web product via full-stack development in Java/TypeScript.
- Assisted in benchmarking new test frameworks for the team, so we could expand e2e testing by 50%...

Open Source Developer Intern, headsetsGoodbye (Javascript)

IQ3Connect Inc., Feb 2021-May 2021

• Increased FPS by 100X for a **machine-learning-powered video app** by concisely passing TinyYOLO inferences to WebGL; furthered it by delivering a <u>demo</u> app used to generate interest with prospective clients.

Software Engineer Intern, <u>Carbon0</u> (**Keras**, Docker, Django)

Carbon0 Games, Aug 2020-Mar 2021

- Acquired 500+ users over 90 days for a green-field MVP in a fast-paced, **sustainability** startup.
- **Independently researched**, implemented, and deployed a <u>plant disease classifier</u> with 89% accuracy, accelerated the company's progress towards an acqui-hire within 12 months.
- Merged 100 pull requests for a team of six developers without hassle by utilizing automated testing with CI.
- Streamlined environment setup using Docker, decreasing friction for OSS contributors.
- Ingested a training dataset of 87,000 RGB images by using TensorFlow APIs to minimize memory usage.

VOLUNTEER EXPERIENCE

Peer Mentor, Student Leader

Make School, 2020-2021

- Facilitated discussions with 30+ peers to instill great work-life balance habits, based on *Getting Things Done*.
- As an extracurricular, I hosted one of the "20 Best Computer Vision Podcasts", as ranked by Welp Magazine.

TECHNICAL SKILLS

Productive - Python, Git, JavaScript, AWS (S3, EC2, IAM)

Familiar - Docker, Java, TensorFlow, TensorBoard, PyTorch

Beginner - WebGL, OpenCV, C++