Rafael Schleder

Software Engineer & Data Scientist

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SKILLS

C/C++ (fluent)

Python (Proficient) incl. Flask, NumPy, OpenCV

Java (familiar) incl. Spring, Junit, Maven

Web Systems, REST, Messaging, Logging, Architecture Design

Natural Language Processing

Machine Learning with Keras, Tensorflow

Scripting in Groovy, Bash

GCP Core Certified incl. GAE, PubSub, BigQuery

Agile, Jira, Scrum, Kanban

HTML, CSS, JS (familiar)

DevOps with git, CI/CD, Build Systems

Data Analysis and Stats

Low Level Programs in Verilog, CAD, Assembly

Development incl. Testing, Debugging, Maintenance

Control Systems, PID

EXPERIENCE

JP MORGAN CHASE & CO. / *Chicago, IL / January '20 – Current*

Software Engineering Intern *Summer '20*

Improved access time for loan database and procedure information by 80% through adding chatbot functionality and implementing backend web system and cache using Java Spring, Groovy Script and Python Flask.

Demonstrated speed improvements to 20+ product managers and managing directors to increase chatbot adoption across commercial banking.

Machine Learning Intern *January '20 – Current*

Achieved goal of 85% Precision on NLP intent matching for Commercial Bank Loan Services employee requests by developing data generation and n-gram similarity checking in Python and training different machine learning algorithms using the Amelia chatbot framework.

UNIVERSITY OF MICHIGAN / *Ann Arbor, MI / October '18 – Current*

Discrete Math TA, Admin Team Lead *January '20 – Current*

Taught and assisted 30+ students directly in an introductory discrete math course covering logic, probability, algorithms, and number theory. Wrote and graded test and homework problems, held office hours, and managed lecture recordings in both in-person and remote settings.

Administered course logistics for over 900 students, including a transition to remote learning. Maintained exam performance and pass rate through this transition by coordinating special accommodations, tracking participation, and ensuring academic equity.

Undergraduate Researcher *October '18 – May '19*

Cut geology experimental component cost by 90% and reduced production time significantly by implementing advanced manufacturing with CNC machining, 3D printing, and iteratively designed CAD models.

DOD/DOE NATIONAL LABS / *Albuquerque, NM / Summer '17, '18*

Technical Intern

Acquired 10+ additional DOE projects through showcasing Electromagnetic Theory Group work by developing website and available skills database using HTML, CSS, and JavaScript.

Analyzed and visualized electromagnetic simulations and experiments with Python and MATLAB. Improved simulations by defining and coding additional shapes and figures in C++.

Contributed to the control system for Autonomous Production of Satellites by developing PID and control logic in C.

PROJECTS

Infrastructure & ML @ Dario *Summer '20*

Reduced time to schedule meetings by 75% over competitors by developing a distributed web app using Calendar APIs, Flask, Node, Keras, and TensorFlow.

Added text, email, and google assistant support using Heroku, Google App Engine and Twilio.

NMDOH Machine Learning *Summer '19*

Improved emergency medical service data query accuracy by 20% by automating report categorization with natural language processing written in C++.

Influenced policy decisions by quantifying a correlation between rurality and death rate using deep learning via TensorFlow.

EDUCATION

UNIVERSITY OF MICHIGAN 2022

B.S.E. Computer Science & Data Science Engineering 3.71/4.0

Extracurriculars: Multi Disciplinary Design 2020 Cohort, COO @ SEPi Entrepreneurship
Course Highlights: Advanced Operating Systems, Human Centric Software Design
Awards: Dean's List '18 – '19, University Honors '18 –'19