MOISEY ALAEV

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TECHNICAL SKILL

- **Software Development:** Linux, CI/CD, Git, API Development, REST, MVC, AGILE/SCRUM, JIRA
- **Backend Development:** Ruby on Rails, Rspec, Python, SQL, JWT, TensorFlow Certified, PyTorch, Scikit-Learn, Pandas
- **Frontend Development:** React, Typescript, HTML, CSS, Bootstrap
- **Working Knowledge:** C++, C#, Java, GraphQL, Apollo, Docker, Redis

WORK EXPERIENCE

Secureframe   Remote
Software Engineer   July 2022 - Present
- Automated external integrations for **security compliance** (SOC 2, HIPAA, etc.) utilizing **Ruby on Rails** with **GraphQL**
- Delivered production-level code, consistently ranked among the *top 50%* of all GitHub contributors in a fast-paced startup
- Developed internal messaging and ticketing **backend** with Slack and Jira utilizing their public **APIs** and **PostgreSQL databases** which increased sales wins over competitors by *15%*
- Led **MDM** automation improvements powered by APIs to satisfy customers' security compliance that resulted in a *10 point* improvement in *NPS* - calculated from customer feedback
- Reduced user complaints by *40%*, resolving *300* bug and infra issues as part of a task force to improve product experience
- Utilized **RSpec** for **unit** and **integration tests,** ensured robust code quality, and enhanced code coverage by *2%*

HADD Machine Learning Research Group   Remote
Software Engineer Co-Lead   January 2021 - January 2023
- Developed Semi-Supervised models for Nonnegative CP Decomposition of Tensors leveraging **Python's TensorFlow**, **PyTorch**, and **NumPy modules**
- Co-led a software team to construct an **open-source Python module** for multiplicative update methods with experimental errors reduced to *~4%*
- Tested packages on **raw data tensors** such as EEG videos, preprocessed and imported using **OpenCV**, **Pandas,** and **pyTaco**

PERSONAL PROJECTS

LLM Web App - Moisey's Meals   June 2023 - Present
- Developed a **GPT LLM** web app tailored to help users meal prep powered by **OpenAI**'s API and a Ruby on Rails backend
- Implemented user authentication using **JSON Web Tokens** for a secure and personalized conversation history
- Integrated the Rails **REST API** with the **React frontend** which improved the latency of the **UI** by *3 seconds*
- Connected a **PostgreSQL** database to store meal prep data, enabling future continuous machine learning opportunities

Forecasting Sunspots and Stocks   June 2021 - September 2021
- Designed **time-series RNNs** in **Jupyter Notebooks** using Tensorflow, preprocessed data with **Pandas** & **Sklearn**, and created windowed datasets
- Forecasted Sunspots with **multi-bidirectional LSTMs**, **convolution**, and **lambda** layers: *errors ≈ 3%*
- Projected Google's Stock Price with LSTMs and **dropout** layers: *errors ≈ 5%*

CNN Research & **Computer Vision Problems**   November 2020 - August 2021
- Spearheaded research on foundations of CNNs, such as convolution, pooling, flattening, dropout, and backpropagation
- Led initial CNN experiment using **Keras** to identify numbers in MNIST dataset
- Achieved *95% classification accuracy* on computer vision datasets in 2021 through iterative model refinement
- Employed **Transfer Learning**, **Image Augmentation**, and **ImageDataGen** with TensorFlow

Zombie Maze Dash Game   February 2019 - August 2019
- Architected an interactive **C++** game implementing Object Oriented Programming concepts such as C++'s **STL** (abstract data structures), **polymorphism**, **inheritance**, **pointer operations**, and **GUIs**
- Optimized CPU load and enhanced speed with efficient algorithms that leveraged pointers and dynamic memory allocation for efficient state management

EDUCATION

University of California - Los Angeles (UCLA)   September 2018 - June 2022
B.S. Mathematics of Computer Science, **Minor** in Statistics - **GPA**: 3.55
- **Programming Coursework:** Data Structures, Algorithms, Software Construction, Operating Systems, Intro to AI, Neural Networks and Deep Learning
- **Mathematics Coursework:** Multivariable Calculus, Discrete Structures, Graph Theory, Machine Learning
- **Statistics Coursework:** Probability, Data Analysis, Data Theory, Modeling and Data Mining