

# Julia Shuieh

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## Education

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**Georgia Institute of Technology** | MS in Computer Science Aug 2022 - May 2024  
Specialization in Machine Learning

**Carnegie Mellon University** | BS in Artificial Intelligence Aug 2019 - May 2022

Minor in Psychology | Dean's List with High Honors (5/6) | GPA: 3.87

Coursework: Deep Learning, Computer Vision, Scalability in ML, Search Engines, Cognitive Robotics

AI: Representation & Problem Solving, Parallel & Sequential Data Structures & Algorithms

## Industry Experience

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**Snap, Inc.** | Software Engineer Intern Aug 2022 - Dec 2022

**Meta** | Software Engineer Intern May 2022 - Aug 2022

- Improve model accuracy by compressing user features to utilize 2000+ features without large costs.
- Design, implement, and train deep learning models using Caffe2/DPER3 frameworks and FBLearner.
- Conducted thorough experiment analysis to make recommendations or guide further explorations.
- Build data pipelines to prepare new training datasets using Hive, Presto, Spark, and Dataswarm.

**Roblox** | Software Engineering Intern May 2021 - Aug 2021

- Developed a CI system for Sourcegraph batch changes to incorporate code review process, increase efficiency, and decrease onboarding time for new users using Github Actions.
- Led the launch of the system with documentation, testing, and Grafana metrics.
- Configured company workflows to migrate microservices from Drone CI to Github Actions.

**VMware, Inc.** | Software Engineer Intern Jun 2020 - Nov 2020

- Created a modular framework for automated testing of installer functionality and UI in various Windows OSes using PowerShell, WPF, and Microsoft Azure virtual machines.
- Organized daily tests on Jenkins with extensive logging that helped catch bugs throughout updates.
- Added new installer functionality, fixed usability issues, and wrote Python scripts for patch creation.

## Research and Teaching Experience

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**CMU CoEx Lab** | Research Assistant Jun 2021 - May 2022

- Led the design and development of a React web app to help freelancers gain confidence, write proposals, and set rates, incorporating techniques to shrink the gender wage gap.
- Gathered data and iterated on machine learning models to recommend rates based on current freelancer rates, profiles, and job market using Upwork API, Pandas, Scikit-learn, PyTorch, and Flask.
- Conducted participatory design workshops to understand freelancers' perspectives and refine designs.

**AI Camp** | Instructor Sep 2021 - May 2022

- Guided students in weekly 1:1 sessions through data collection, model training, and app deployment to make machine learning products that solve real-life problems based on their interests.
- Detected traffic objects and categorized facial expressions using YOLOv4, MobileNet, Keras, and Flask.
- Created a sentence completer and text summarizer using RNNs, transformers, and Heroku.

**Carnegie Mellon** | Intro to ML (10315) Teaching Assistant Jun 2021 - May 2022

- Taught machine learning concepts to 150 students by solving practice problems and applications through recitations, office hours, and Piazza discussions.
- Designed, tested, and graded course assignments and exams with professors and TAs.

**Belle AI** | AI Research Intern Dec 2020 - Mar 2021

- Research existing technologies and papers to design and propose full-fledged AI solutions.
- Collaborate with technical leads and interns remotely to write detailed proposals for clients.

## Skills

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- **Languages:** Python, C/C++, C#, Java, SQL, Lua, R, HTML/CSS, JavaScript, Bash, Powershell
- **Libraries:** Tensorflow, Keras, PyTorch, OpenCV, Numpy, SciPy, Pandas, Scikit-learn, Flask, React
- **Tools:** AWS, Jupyter, CUDA, Git, Azure, JIRA, LaTeX, Linux, VSCode, Unity, Heroku, Figma