

Britt Ho

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TECHNICAL SKILLS

Specialties: Machine Learning, Deep Learning, Computer Vision, NLP, HPC, Full-stack, Infra

Programming Languages: Java (advanced), C++ (advanced), Python (advanced); Swift, R, and JavaScript (intermediate)

Technical: PyTorch, MQTT, Linux, LLMs, TCP/IP, Postgres, TensorRT, SQL, NoSQL, AWS, TensorFlow, Cloud Computing

EDUCATION

University of the Pacific | B.S. in Computer Science & Data Science | GPA: 3.7

CA 12/2024

University of Illinois at Urbana-Champaign | Computer Engineering

IL 08/2020 - 05/2022

Publications: [Elsevier MLWA Publication](#) (first author, 2024), [Springer AI Book Chapter](#) (2024)

Awards: Dean's Honor Roll, [University's Best Project](#) (AI/ML), [2nd place H2O Hackathon](#) (2022), VEX Robotics (Design Award, Championship Award, Finalist Award, Sportsmanship Award)

EXPERIENCE

Solar Energy Lab - University of the Pacific

Remote, CA 02/2026 - Present

Lead Researcher

- Developing a rigorous taxonomy of machine learning architectures (deep learning, ensemble, and physics-informed models) to optimize edge-computing and state detection in PV hardware.
- Conducted a systematic literature review analyzing data mining techniques that transform standard solar infrastructure into intelligent data sources.

Brei Robotics

Remote, CA 07/2025 - Present

Founder & Lead Engineer

- Engineering a custom autonomous control and perception stack for a legged robotic platform, implementing real-time onboard AI inference and a robust embedded architecture to achieve full behavioral autonomy.

Skild AI

San Mateo, CA 08/2025 - 12/2025

Robotics Data Lead (Payroll: Robot Ops)

- Diagnosing and resolving ROS2, perception, and inference failures in humanoid robotics deployments, formalizing recovery workflows and reducing system downtime.

ACE Mentorship LLC

Remote, CA 04/2025 - 02/2026

Software Engineer Intern | Search Engines, Web Crawling, Semantic Search, Sentence Transformers, Deep Learning

- Building a domain-specific search engine involving custom web crawlers, indexing, and vector-based retrieval pipelines.
- Optimizing vector spaces via normalization, dimensionality reduction, and hybrid retrieval (keyword + semantic search).
- Built ML pipelines for dataset generation, neural network training, and AI-driven semantic retrieval.

QQ Tech, Inc

Tracy, CA 08/2024 - 12/2024

Data Science Intern | Web crawler, Machine learning, NLP

- Developed robust **web scraping** pipelines to gather and process structured and unstructured data for **NLP** projects.
- Implemented efficient classification algorithms by collaborating with front-end developers and data scientists.

NVIDIA

Santa Clara, CA 01/2024 - 08/2024

HPC/DL Performance Engineer Intern | Deep Learning, HPC, PyTorch, TensorRT, Performance

- Optimized **GPU** performance across PyTorch, TensorFlow, and **HPC** frameworks via kernel and system-level tuning.
- Automated benchmarking and monitoring with Python, streamlining data collection and accelerating performance analysis.
- Resolved performance issues with global teams, improving GPU utilization, scaling, and system reliability
- Delivered comprehensive Tableau reports to guide strategic decisions for 5+ global teams.

Dr. Pallipuram's Research Lab - University of the Pacific

Stockton, CA 01/2023 - Present

Undergraduate Research Fellow | NLP, LLM, GPT-3.5 Turbo, Data mining, Recommender systems, Generative AI

- Developed an **NLP** framework leveraging GPT-3.5 Turbo for user review analysis and recommendation generation.
- Published as [first author](#) in *Elsevier's Machine Learning with Applications*, achieving **90%+** Bard-based user satisfaction.
- Conducted NLP text classification research, published findings to [book chapter](#) "Machine Learning in Educational Sciences".
- Developed a Virtual TA using **Sentence Transformer** and **Prompt Engineering**.

UIUC Electrical and Computer Engineering - Advanced Power Lab

Champaign, IL 06/2021 - 05/2022

Research Assistant | BeagleBone Black, MQTT, TCP/IP, Java Graphics, Embedded Systems and Programming

- Architected a real-time MQTT data monitoring pipeline bridging analog power signals with a digital control interface.
- Pioneered the lab's first GUI to visualize 10+ real-time signals, integrating emergency shutdown and customizable controls.