

# AOT CHANTHORN

Berkeley, CA | [chanthorn@berkeley.edu](mailto:chanthorn@berkeley.edu) | [aotchn.me](http://aotchn.me) | <https://github.com/AotChn>

## SUMMARY

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Mathematics senior at UC Berkeley focused on machine learning systems. Experienced in RL training pipelines, robot policy learning, and simulation-based optimization for autonomous systems

## EDUCATION

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### University of California, Berkeley

Expected Graduation: Dec 2026

*Bachelor of Arts in Applied Mathematics, Focus in Operations Research*

**Relevant Coursework:** Probability, Data Structures, Abstract Linear, Linear Programming and Network Flows, Methods of Manufacturing Improvement, Discrete Math, Math Analysis

## WORK EXPERIENCE

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### Reinforcement Learning Engineer Intern

Jun 2026 – Present

*Seres*

*Milpitas, CA*

- Engineered reinforcement learning-based locomotion policies for legged robotic systems, improving gait stability, robustness, and recovery behavior
- Validated policy performance across simulation and hardware by analyzing instability, contact failures, actuator behavior, and sim-to-real gaps

### Server

Dec 2025 – Jun 2026

*Mugunghwa*

*Berkeley, CA*

- Delivered high-quality customer service in a fast-paced environment

## PROJECTS

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### Robot Reinforcement Training | *Python, Nebius, Robotics*

2026

- Assembled an end-to-end video-to-robot learning pipeline (Video2Robot, PromptHMR, MJLab) to train policies from raw video demonstrations using imitation learning techniques
- Trained learning policies on NVIDIA H100 GPUs, optimizing performance across large-scale parallel environments
- Deployed trained policies to control simulated robots performing complex motion tasks

### Voltorb Flip Machine Learning Solver | *C++, SFML, Python, Excel*

2025

- Constructed a probabilistic decision-making engine using stochastic gradient methods to optimize move selection under uncertainty
- Achieved 95 percent win rate on mid-tier levels through expected value modeling and risk-aware strategy optimization
- Delivered polished UX interactive probability heatmaps, per-move rationale overlays, seed-able simulations
- Generated structured gameplay data (CSV) for offline analysis, regression testing, and model validation

### Evolution N.E.A.T Simulator | *C++, SDL*

2025

- Implemented NeuroEvolution of Augmenting Topologies (NEAT) from scratch, evolving neural network structure and weights without backpropagation
- Designed a real-time simulation engine using SDL to model agent populations, fitness evaluation, and generational selection
- Engineered genome encoding, mutation, and crossover mechanisms enabling dynamic topology evolution and speciation

## TECHNICAL SKILLS

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**Languages:** C++, SQL, Python, Java

**Machine Learning:** Neural Networks, Reinforcement Learning, Evolutionary Algorithms (NEAT)

**Data Analysis:** Pandas, NumPy, Matplotlib, Data Processing, Statistical Analysis, AMPL

**Systems, Simulation:** SDL, SFML, Simulation Design, Real-Time Rendering

**Web:** React, Flask, REST APIs

**Tools :** Git, CMake, VSCode, IntelliJ