Jinwoo Park

https://github.com/curt-park/ • https://www.linkedin.com/in/curt-park/ • www.jwpark.co.kr@gmail.com

Highlights

- **Client-Centric, Domain-Independent Problem Solver**: Skilled in working closely with clients to understand complex challenges and translate needs into actionable technical solutions, ensuring alignment with business objectives across diverse industries.
- **Cross-Functional Technical Leadership**: Demonstrated success in coordinating with cross-functional teams to implement ML solutions that align with organizational goals, particularly in cost management, resource scaling, and end-to-end system integration.
- **Architect of Robust, Scalable Systems**: Extensive experience in building distributed systems that meet enterprise-level demands, leveraging Kubernetes, Docker, and CI/CD for seamless scaling, zero-downtime, and reliable system performance.
- **Consistent and Dedicated Contributor to Open-Source Communities**: Regularly contribute to projects that advance the AI and ML fields, including widely used libraries like PyTorch and Huggingface.

Experience

Aug. 2023 - present — **ML Engineer**; SNOW Corporation (Seongnam)

- Roles: Text-to-image personalization for productions, system optimization for cost reduction, service migration to k8s, and internal service development.
- Skills: Computer Vision, Python, Docker, Kubernetes, PyTorch, ComfyUI, Git

Jan. 2022 - Jul. 2023 — **ML Team Lead (Team Initiator)**; Annotation-AI (Seoul)

- Roles: Computer vision model implementation, MLOps product design, high-performance inference service.
- Skills: Computer Vision, Python, Golang, Docker, Kubernetes, PyTorch, Git

Oct. 2020 - Jan. 2022 — **ML Project Lead (Team Initiator)**; MakinaRocks (Seoul)

- Roles: Industrial combinatorial optimization, FPGA/ASIC placement with Distributed Reinforcement Learning.
- Skills: Reinforcement Learning, Python, Docker, PyTorch, Git

Sep. 2019 - Oct. 2020 — **ML Research Engineer**; J.MARPLE (Seoul)

- Roles: Model predictive control research, active learning, model compression for embedded systems.
- Skills: Model Predictive Control, PID, Model Compression, Python, Docker, PyTorch, Git

Nov. 2018 - Aug. 2019 — **ML Research Engineer**; Medipixel (Seoul)

- Roles: Guide-wire control automation, off-policy learning, team methodologies.
- Skills: Reinforcement Learning, Python, Docker, PyTorch, Git

Oct. 2014 - Jan. 2017 — **SW Developer**; Ericsson (Anyang)

- Roles: LTE RBS L3 feature development, test automation.
- Skills: C/C++, Erlang, Git, Gerrit

Nov. 2013 - May. 2014 — **SW Developer**; Smilegate (Seongnam)

- Roles: TCP/IP server testing tool development, distributed system development.
- Skills: C++, IOCP, MFC

Education

2006 - 2014 — **Bachelor's Degree, Computer Science**; Dongguk University (Seoul)

- Teaching Assistant, Research Assistant in Visual Simulation Lab, Honors student for years.

OpenSource

- Contributions to PyTorch, Huggingface, BentoML, KServe, GoCV, PyG, etc.
- Key Projects:
  - **rainbow-is-all-you-need** ★ **1.9k** – A comprehensive tutorial on reinforcement learning, guiding users from DQN to advanced techniques in Rainbow, widely used by practitioners and learners.
  - **pg-is-all-you-need** ★ **860** – A detailed, accessible guide to Policy Gradient methods, supporting learning and experimentation within the AI community.
  - **rl_algorithms** ★ **510** – Structural implementations of key reinforcement learning algorithms, helping teams integrate RL into real-world applications.
  - **segment-anything-with-clip** ★ **331** – An advanced resource combining segmentation with CLIP, offering practitioners versatile segmentation tools.
  - **model_compression** ★ **230** – Provides algorithms for deep learning model compression in PyTorch, optimized for embedded systems.
  - Additional contributions include tools like **serving-codegen-gptj-triton** and **comfyui-onprem-k8s**, both supporting efficient model serving and on-premise deployment.

Publications

Dec. 2021 — "**Deep Reinforcement Learning for Guidewire Navigation in Coronary Artery Phantom**" published in IEEE Access

Jihoon Kweon; Kyunghwan Kim; Chaehyuk Lee; Hwi Kwon; Jinwoo Park; Kyoseok Song

Patents

Dec. 2022 — **[1] METHOD FOR AUTOMATING SEMICONDUCTOR DESIGN BASED ON ARTIFITIAL INTELLIGENCE**; 1024748560000

Jinwoo Park; Tod Myung; Jiyoon Lim; Kyeongmin Woo

Jul. 2022 — **[2] METHOD FOR AUTOMATING SEMICONDUCTOR DESIGN BASED ON ARTIFITIAL INTELLIGENCE**; 1024200710000

Jinwoo Park; Tod Myung; Jiyoon Lim; Kyeongmin Woo

Extra Activities

Jan. 2022 — **MODUCON 22**; 나의 애자일 개발 문화 도입기: 스타트업을 여행하는 히치하이커를 위한 안내서

Dec. 2021 — **DEVIEW 21**; 강화학습, 산업의 난제에 도전하다!: ASIC 반도체 설계(Floorplan) 자동화

Sep. 2021 — **K-MOOC**; 강화학습의 수학적 기초와 알고리듬 이해 - 전문가 사례소개

Aug. 2020 — **AI Grand Challenge 20**; Won first prize at Model Compression Track (200,000,000 Won)

Nov. 2018 — **Convex Optimization for All E-book** published