BRANDON KUNKEL

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440-667-5647
Github | LinkedIn

SKILLS

Python
Dart / Flutter
C / C++ / CMake
Rust
HTML / CSS / JS
Databases
Docker / Kubernetes
OpenAPI
Linux
Git - GitLab/GitHub/Bitbucket
CI/CD + DevOps
Google Cloud
AI/ML
Supervised Learning
Reinforcement Learning
OpenCV
CUDA / OpenCL

PROJECTS

Explainable Fuzzy Challenge
Flutter App AutoCall
NASA Student Launch

INTERESTS

UI/UX
eSports
non-eSports
Cooking / Baking
Fitness

SUMMARY

Lifelong learner with full stack engineering experience, a passion for optimization, and strong interest in AI/ML and engineering leadership.

EXPERIENCE

Full Stack Software Engineer, Pieces — October 2021 - October 2022

- Contributed across the full tech stack: implemented front end features for native and web apps, architected stateless cloud API microservices, and productionized NLP + CV ML models.
- Streamlined MLOps and DevOps procedures with CI/CD, open-source company linter, cloud artifact registry, data tracking pipelines, dockerization and internal documentation procedures.
- Built and released new products: Code++ Chrome Extension, CodeFromScreenshot.com, Runtime OCR API, and Pieces for Colors.
- Active in company hiring process, mentoring developers, and code reviews.

Senior AI Engineer, Thales Group — 2018-2021

- Lead development of first-of-its-kind genetic fuzzy logic toolkit for interpretable and explainable AIs in safety critical applications.
- Hosted knowledge transfer workshops to train 40+ global Thales AI Engineers/ Scientists to use proprietary AI/ML toolkit for their applications.
- Contributed to research papers, patent applications, and government proposals. Awarded 1 patent and 2 patents pending.
- Leveraged Gitlab CI pipelines to automate build, test, code quality analysis, and documentation generation to improve productivity.

Software Engineer, Psibernetix — 2017-2018

- Start-up acquired by Thales Group in Dec 2018.
- Built low-fidelity simulation environments to develop genetic fuzzy AI solutions for multi-agent reinforcement learning and optimal real-time autonomous control proof-of-concepts.
- Developed genetic fuzzy-logic machine learning suite and improved training efficiency—90% improvement in CPU-bound applications, up to 1000% with CUDA/OpenCL. Achieved nanosecond level efficiency in inference speed.

EDUCATION

BS Aerospace Engineering , University of Cincinnati — 2012-2017

Graduated Summa Cum Laude at top of class. German Minor. Distinguished University Honors Scholar. Combined 2 years of internship experience at MIT Lincoln Laboratory and ATA Engineering.