

## LANGUAGES

Python  
Golang  
C / C++ / CMake  
Dart / Flutter  
HTML / CSS / JS / TS  
Rust

## SKILLS

Node.js / React.js  
SQL + NoSQL Databases  
Message Streams + Queues  
Google Cloud + AWS  
Terraform  
Docker / Kubernetes  
Linux  
OpenAPI  
Git - GitLab/GitHub/Bitbucket  
CI/CD  
AI/ML  
Supervised Learning  
Reinforcement Learning  
OpenCV  
CUDA / OpenCL

## PROJECTS

Explainable Fuzzy Challenge  
Flutter App AutoCall  
NASA Student Launch

## EXPERIENCE

### Senior Software Engineer, Journera — Dec 2022 - Feb 2024

- Developed and maintained scalable, event-driven data pipeline written with Golang and using Kinesis, Kafka, SQS, Firehoses, S3, MySQL and DynamoDB to ingest and match millions of travel data events hourly.
- Cut costs of generating marketing reports by 90% by building React.js/Typescript application + Golang service to query data warehouse.

### Software Engineer, Pieces — Oct 2021 - Oct 2022

- Productionized CV, NLP (LSTM + LLM) models and supporting libraries (AST parsers, tokenizers) for local and cloud deployments as external facing APIs.
- Improved MLOps and DevOps infrastructure with CI/CD, open-source company linter, data pipelines, cloud artifact registry for compiled ML library binaries, containerization, and writing technical documentation.
- Released 5 products: [Code++ Chrome Extension](#), [CodeFromScreenshot.com](#), [OCR API](#), [NLP API designed for code detection](#), and Pieces for Colors.
- Performed performance studies on native Flutter app and improved frame rate by 43% and reduced app load time by 91%.
- Participated in interviewing process that lead to 6 hires and mentored 10 junior developers.

### Senior AI Engineer, Thales Group — Dec 2018 - Oct 2021

- Lead development of state-of-the-art genetic fuzzy logic toolkit for developing interpretable and explainable AI/ML models for safety critical applications.
- Hosted workshops to train 40 engineers + scientists to use our custom AI/ML toolkit to build models for their applications and provided project support.
- Published research papers, submitted government proposals, awarded 2 patents and 1 patent pending.
- Improved developer efficiency by implementing Gitlab CI/CD pipelines to build, test, code quality analysis, and documentation generation.

### Software Engineer, Psibernetix — Jul 2017 - Dec 2018 [Acquired by Thales]

- Improved model training efficiency of genetic fuzzy AI/ML toolkit —90% improvement on CPU, up to 1000% on GPU with CUDA/OpenCL. Achieved 30 nanosecond efficiency in model inference speed.
- Built simulation environments to train genetic fuzzy AI models for multi-agent real-time autonomous control problems.

## EDUCATION

**BS Aerospace Engineering , University of Cincinnati — 2012-2017**