

# Xian Kai Ng | Software Engineer

+1-858-539-3586 • [ngxiankai@gmail.com](mailto:ngxiankai@gmail.com) • [nxkai.app](https://nxkai.app)

## Academic Qualifications

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University of California Los Angeles

GPA: 3.9 / 4.0 • **Summa Cum Laude** • B.S. Computer Science • Dec 2019

## Employment Experience

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- Tesla** **Palo Alto, CA**  
*Feb 2020–*
  - Senior Software Engineer*
  - Certificates backend for ISO 15118 Plug and Charge (opening Tesla chargers PnC function to many OEMs)
  - Reduced database connections by 100x. Reduced latency on 20K+ qps customer facing endpoints from 5.0s to 0.5s.
  - Cloud profiles primary backend engineer; MongoDB-backed, end-to-end encrypted
  - Re-architect Vehicle List indexing to allow 10\*100x (1000x) scaling by parallelizing across lists\*vehicles (Elasticsearch, Redis)
  - Re-architect OTA update log ingestion to go via Kafka to scale to 100x fleet size; rewrote Ruby to Go
  - Zero-downtime upgrade of 5-year-old Elasticsearch
  - DevOps (scaling, monitoring, on-call) for 10+ distributed services hosted on multiple regions and clusters of Kubernetes
- Appfolio** **Goleta, CA**  
*Jun–Sep 2019*
  - Software Engineering Intern*
  - Parallelized core architecture for 50% speedup of tenant screenings, 2nd highest income driver
  - Reworked 7 year old core front-end (screenings report) for modern design and legal compliance
  - Regenerated PDFs of reports in their original code version (!important)Reference: Eric Hawkins
- Procore** **Carpinteria, CA**  
*Jul–Sep 2018*
  - Software Engineering Intern*
  - 4x Database time reduction at scale (65k+ items)
  - 100K+ item, low latency search in npm @particles Select componentsReference: Ben Coffman

## Selected Projects

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- Ball bouncing simulator (Java) • Gravity balls & explosive balls too
- Navigator (C++) • A-star algorithm; LA map data

## More About

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- Won UCLA's undergraduate writing award (3 of 12,000 win) • On the Ethics of Transhuman Relationships
- I do Wushu (武术) • USA Collegiate Wushu Champion

## Languages, Tools, Buzzwords

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Google • Bash • UNIX • C • C++ • Go • Git • HTML • CSS • JavaScript • MongoDB • Devops • Kubernetes • PostgreSQL • ReactJS • Ruby on Rails • StackOverflow • AWS • Machine Learning • Blockchain • Mentorship

Revised: Apr 25, 2024