

# Xian Kai Ng | Software Engineer

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## 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*
  - 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 scale to 100x fleet size; rewrote Ruby to Go, leveraged Kafka
  - Zero-downtime upgrade of 5-year-old Elasticsearch
  - Remotely ramped up
- **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
- Text reminder for calendar (AWS, MEAN) • Designed to help World Relief

## 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++ • Golang • Git • HTML • CSS • JavaScript • MongoDB • NodeJS • Java • PostgreSQL • ReactJS • Ruby on Rails • StackOverflow • AWS • Machine Learning • Blockchain • Mentorship

Revised: Aug 20, 2022