# Ke Lin

+86 137-117-15601 leonard.keilin@gmail.com ke-lin-7890112b5 leonardodalinky Ke Lin

## Education

**Tsinghua University** **Sep. 2022 – present**
*Master of Engineering (M.Eng.) in Software Engineering* *Peking, China*

**Tsinghua University** **Sep. 2018 – Jun. 2022**
*Bachelor in Software Engineering (GPA: 3.69/4.0, Top 20%)* *Peking, China*

## Relevant Coursework

- Data Structures
- Database Management
- Artificial Intelligence
- Software Engineering
- Computer Network
- Applied Cryptography
- Natural Language Proc.
- Computer Vision

## Experience

**Momenta** **Jan. 2021 – Apr. 2021**
*AI Backend DevOps Intern* *Peking, China*

- Developed an automated service for scheduling autonomous driving model training tasks based on Kubernetes.
- Utilized Golang to reduce redundant resource consumption and estimated the approximate cost of training sessions.
- Processed the runtime logs of training tasks and stored them into AWS Cloud Storage for visualization.
- Automated the deployment of driving models on AWS and the updating of the K8s image from the upstream repository.

## Projects

**Farthest Point Sampling Library** | *Python, Rust, C++* **Sep. 2023**

- Developed a high-performance farthest point sampling library `fpsample` for Numpy arrays.
- Achieved 100× faster than vanilla implementation in pure Numpy for simplified preprocessing of 3D point clouds.
- Published PyPI packages for easy use in x64 platforms to avoid multi-language compilations.

**Multilingual Sentence Aligner** | *Python* **Jun. 2022**

- Developed a toolkit for automated multilingual sentence alignments to break long texts into smaller aligned pieces.
- Utilized dynamic programming to align sentences with similar semantic scores and skip irrelevant content.
- Visualized the aligned multilingual sentences in a two-column fashion for fast lookup of certain sentences.

**Sports Event Management** | *Java* **Dec. 2020**

- Designed a sample campus sports event management system to simulate the common functions of event management.
- Incorporated VueJS frontend with SpringBoot backend and MongoDB through RESTful and GraphQL APIs.
- Distributed the application using docker and achieved the throughput of 500RPS under JMeter pressure tests.

## Publications

- Yiyang Luo*, Ke Lin*, and Chao Gu. "Lost in Overlap: Exploring Watermark Collision in LLMs", Under review at ACL 2024.
- Ke Lin, Yiyang Luo, et al. "Zero-shot Generative Linguistic Steganography", Submitted to NAACL 2024.
- Ke Lin. "Skipping Scheme for Gate-hiding Garbled Circuits." arXiv preprint arXiv:2312.02514 (2023).
- Yiyang Luo*, and Ke Lin*. "PISA: Point-cloud-based Instructed Scene Augmentation." arXiv preprint arXiv:2311.16501 (2023).
- Glani Yasir, Ping Luo, Ke Lin, et al. "AyatDroid: A Lightweight Code Cloning Technique Using Different Static Features." 2023 IEEE 3rd International Conference on Software Engineering and Artificial Intelligence (SEAI). IEEE, 2023.

## Technical Skills

**Languages**: Python, Rust, C++, Java, Golang, ReactJS, SQL
**Technologies/Frameworks**: PyTorch, Ubuntu, ArchLinux, PostgreSQL