Kashun Cheng

OCF Lab, MLK Jr. Building, 2495 Bancroft Way
Berkeley, California

Email : kashun@berkeley.edu
Legal Name : Jiajun Cheng
Mobile : (+1) 628-236-9632

EDUCATION AND RESEARCH

- **ShanghaiTech Uiversity** — Shanghai, China
  Undergraduate; Computer Science; School of Information Science and Technology — *Sept. 2020 – Jul. 2024 (Expected)*
  - **GPA**: 3.67 / 4.0

- **University of California, Berkeley** — Berkeley, California
  Visiting Student; Computer Science; College of Engineering — *Jan. 2023 – Dec. 2023 (Expected)*
  - **GPA**: 3.77 / 4.0

- **University of Illinois Urbana-Champaign** — Champaign, Illinois
  Undergraduate Visiting Researcher; Computer Science; Thomas M. Siebel Center — *Jun. 2023 – Jul. 2023*

EXPERIENCE

- **Deemos Technologies Inc.** — Shanghai, China
  DevOps Engineer (Intern) — *Oct. 2021 - Dec. 2022*
  - **Network Architecture**: Connected multiple distributed LANs together by Wireguard. Applied a well-designed network architecture to reduce latency.
  - **Application Developing**: Built the core service for Wand (a popular application that generates cartoon avatars powered by SofGAN) and Wand community, including asynchronous avatar generation, user content storage, avatar ranking, and Wand social networking service.
  - **UI Developing**: Built the user interface (web) for Wand community.

- **GeekPie Association** — ShanghaiTech University, Shanghai, China
  Member — *Sept. 2020 - Present*
  - **CI/CD Pipelines**: Deployed a GitLab instance to provide source code escrow and CI/CD pipelines for software developers in GeekPie Association.
  - **Data Warehousing**: Created a storage cluster based on Ceph and exposed several widely-used and storage-related services to the public, including ShanghaiTech Open Source Mirror, GeekPie S3 Object Storage, and a temporary file storage service.
  - **Applications Management**: Deployed a Kubernetes instance to manage all applications of GeekPie Association. Providing TLS certificate renewal automation, Ceph persistent volumes, ingress, and load balancers.
  - **Event Organizers**: In charge of G22G (also known as GeekPie 2022 Game), GeekPie 2021 Freshman CTF, and GeekPie 2022 Freshman CTF.
  - **Application Developer**: Developed many projects including GAuth (also known as GeekPie Authentication), ShanghaiTech OneAPI (a python package that encapsulates web services APIs of ShanghaiTech University), and Grade (a check-in statistics system for lectures).

- **Open Computing Facility** — University of California, Berkeley, California, USA
  Staff — *Feb. 2023 - Present*
  - **Reproducibility**: Used NixOS to achieve a reproducible operating system for computers in OCF Lab.

- **X-Lab** — University of Illinois Urbana-Champaign, Illinois, USA
  Undergraduate Visiting Researcher — *Jun. 2023 – Jul. 2023*
  - **Acto**: Improved code quality and added new features, including higher scalability with Ray, a new Java operator to be tested, an extensible Kubernetes Oracle interface, and highly automated and reproducible deployment methods, all improve Acto's ability to perform automated end-to-end testing tool for Kubernetes operators/controllers.

CONTESTS AND AWARDS

- 2nd, Intel Innovation Hackathon, Beijing, China — *Dec. 2020*
- Participated, START Hack, Switzerland (Virtual) — *Mar. 2021*
- Final, Hongminggu CTF 2021, Fujian, China — *Apr. 2021*
- 4th, ISC 2022 Student Cluster Competition, Hamburg Germany (Virtual) — *Jun. 2022*
- 1st, IndySCC 2022 Student Competition, Dallas, USA (Virtual) — *Nov. 2022*
- Participated, START Hack, St. Gallen, Switzerland — *Mar. 2023*

Projects and Open Source Contributions

- **Passwordle**: Passwordle is a game akin to Wordle, where players aim to guess an eight-character alphanumeric code (with case sensitivity). The game supplies users with a salt, and upon entering their guessed code, the website calculates md5sum(user_input + salt). It then contrasts the user's base64-encoded md5 value against the authentic md5 value's base64 encoding, revealing the disparity between the two values.
- **Fiber**: Contributed two pull requests that have been merged to Fiber (Fiber is an Express inspired web framework built on top of Fasthttp, 22.5k stars on GitHub).
- **Tar Web Stream**: Built a library to create a tar archive from file streams, which is compatible with browsers.
- **ShanghaiTech Mirror Frontend**: Built the user interface of ShanghaiTech Mirror with other GeekPie members.
- **Acto**: Built the user interface of ShanghaiTech Mirror with other GeekPie members.

Programming Skills

- **Programming Languages**: Go, Rust, JavaScript (w/wo type), SQL, Python, Nix, C, C++
- **Frontend Web Development Stacks**: React, Vue,
- **DevOps Stacks**: Docker, GitHub Actions, Kubernetes, Nginx, Nix
- **High Performance Computing Stacks**: MPI, Spack