"Kevin Gni"

Making the digital world more secure, reliable and accessible

bini00001@stud.uni-saarland.de — or send me a message on LinkedIn ;)

EDUCATION

Universität des Saarlandes
MSc. in Computer Science; Saarbrücken — *Apr 2023 - now*

New York University
BSc. in Computer Science; BSc. in Interactive Media Arts; New York City & Shanghai — *Sep 2014 - May 2018*

LANGUAGE PROFICIENCY

English PROFICIENT | **C2**: *IELTS* **8.5**, *Listening 9, Reading 9, Writing 8, Speaking 8*   *best o' 2*

Old English COMPETENT | *capable of reading Beowulf and the Exeter Book (with dictionary from time to time)*

Shanghainese & Mandarin Chinese MOTHER TONGUE

Deutsch | *working hard on it now*

MAJOR RESEARCH AND PROFESSIONAL EXPERIENCE

Research Assistant (HiWi) — Nov 2023 - now
With Prof. Wouter Lueks at CISPA (Helmholtz Center for Information Security)
- Researching and developing tools for analysing Tor traffic
- Implementation of advacned cryptographic protocols on smartcards incl. anonymous and verifiable transaction scheme utilising recursive oblivious RAM (ORAM)
- Supporting the course *Privacy-Enhancing Technologies*: subjects include homomorphic encryption, private information retrieval, anonymous communication, differential privacy, etc.
- Building an automated submission and grading platform for the aforementioned course

Research Associate — Sep 2018 - July 2019, Jun 2020 - late 2021
With Prof. Olivier Marin on Reliable Distributed Systems
- Compartive study of experimental ML-driven failure detection algorithm vs traditional ones on efficiency and accuracy
- A distributed database for geospatial data tailored for cloud infrastructures with GeoTrie
- Automated building and deploying distributed service on HPC and commercial IAAS

Payment Engineer — Nov 2019 - Oct 2022
Thales China, Shanghai
- Building secure card payment solutions (VISA, Master, JCB, etc.) for financial institutions: CUB, BSH, Cathay, etc.
- Designing and deploying on-premise, secure data processing systems: secure exchange and storage, transparent en/decryption, key management, data protection law compliance, etc.

Teaching Assistant — Jan 2019 - early 2022
With Prof. Olivier Marin for course Operating System, Distributed System & Capstone Project
- Leading review sessions and office hours, answering questions and offering academic support
- *Operating System* covers topics incl. processes and threads, context switching, scheduling, logical memory management, MMU, paging and address translation, hardware resource management, file system, network stack, etc.
- *Distributed System* covers topics incl. linearisability, message passing, distributed shared memory, data consistency and coherence, consensus, election and quorum, fault tolerance and detection, etc.

SOCIAL AND HUMANITARIAN WORK

Research Assistant — Nov 2018 - May 2019
With Prof. Lena Scheen
- Interview with old Shanghai city residents whose houses soon to undergo the so-called *Demolition and Relocation*
- Study on the effect of such urban relocation scheme on the life of the city's indigenous residents, and consequentially the impact on the city's indigenous language and culture

Social activist
<div align="right">Late 2014 - now</div>

For the preservation and the promotion of the Shanghainese language (Wu Chinese) and culture

- Developing input methods for Shanghainese and other Wu language on PC and on mobile devices
- Helping set up and operate an online database of audio and video archives of Shanghainese, as well as historical and modern folk documents on indigenous Wu culture

Volunteer worker
<div align="right">Ca. 2012 - now</div>

For the local queer/LGBTQ+ community

- Joint-organising the various effort during secondary & higher education to distribute education leaflets, condoms, birth control pills and other protective measures promoting safe sex and women's reproductive rights
- Volunteer work for *Shanghai Pride & Queer and Ally* society at university: organising panel talks, supporting solidarity events, miscellany on-site support, etc.

SKILLS, INTERESTS AND HOBBIES

Digital photography: specialised in portraits w/ EDC incl. Ricoh GR IIIx

Interpreting: consecutive and simultaneous interpretation for private conference and events (en-wuu & en-zh)

Shanghainese writings: transcription of folk songs and stories; translation of foreign-language literature

Programming: C; x86 Assembly; modern C++ (post 11); C#; Java, Scala, Kotlin; Python (w/ numpy, pandas, matplotlib, etc.); common UNIX/Linux tools & bash; experience with common IAAS: GCP, AWS, etc.; Gitlab; Smartcard (Javacard Classic & GlobalPlatform)

Farming (actual, in the field): maize, potato, passionfruit, luffa, chillies, assorted herbs and cornflower, etc.

Novella and fan-fiction writing: some works hosted on Archive of Our Own with kudos

Digital interactive art installation: various pieces with fabric, 3D-printed materials, displays and other computer parts, utilising motion cameras and a range of other environment sensors

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