



Tim Kehres

Experience Details

Teachers Network

Principal Designer / Architect

Hong Kong, 2010 – Present

The teachers-network.com is currently under development (in alpha test) and is a collaborative environment for the creation and maintenance of open source curriculum frameworks with special emphasis on STEM and computer science training. Open sourced support materials including student mobile applications, presentation material, video tutorials, and other digital material will be hosted as needed. Future additions will include Learning Management System (LMS) integration, coding tools and electronic design tools.

Work on the prototype site (szteachers.com) began in 2010 with work transitioning over to teachers-network.com in 2018. All work is being performed under the Jade Connections umbrella utilizing the Jade datacenter services.

During this period also provided tutoring for students from primary school age through adult in the areas of English, Critical Thinking, Math, and Science. This included test preparation (college level) and writing (university level).

Jade Connections Limited

Managing Director / CEO

Hong Kong, January 2004 – Present

Established Jade Connections as an Internet consulting and services company delivering Internet system and network solutions. Jade's focus is with the design, implementation, deployment, management and outsourcing of enterprise networks with security and operational reliability and efficiencies being the top priorities. Responsible for all datacenter operations including hardware/software upgrades and configuration. Current projects are in the area of enterprise security and involve the integration of routers, firewalls, IPS, SIEM and network management systems into the Jade Security Framework. Past projects include:

- ▶ Designed, coded, tested and deployed the first version of the Jade Security Framework, a thin extendable security layer providing easy to use hooks for applications and security components to control network security settings. The first version includes tools for the manipulation of firewall IP block rules (timed and static) by any machine on the network as well as command line tools used to run and maintain the Jade DNSBL spam defense.
- ▶ Designed and fielded the first network management infrastructure (Zabbix 2 based). The system was redesigned and extended in early 2018 with Zabbix 3.4.7. The new system added problem response automation to many of the triggers increasing overall system uptime and reliability.



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Jade Connections Limited (cont)

- ▶ Designed, coded and deployed the Jade Spamproc Tools. These tools provide automated spam mail header analysis, ARF based abuse reporting, notification to the applicable service provider and insertion into the Jade DNSBL. Several years of manual analysis time has already been saved.
- ▶ Built the first Jade collaborative / purpose driven web community. Integrated tools and practices from a range of disciplines including social networking, publishing (document workflow), project management, collaborative team building and management, and Internet communications. The first alpha release (PinoyTalk) went online in early 2009.

Macau Network Information Center (MONIC)

Consultant / Enterprise Architect **Macau Sept 2010 – February 2017**
Operation for MONIC, the Internet domain name registry for Macau (monic.mo) was transferred to HNET in March 2011. Organized the initial team from Hong Kong and Macau who put together the winning government proposal. Built and deployed the initial systems:

September 2010: Team establishment with HN Group (Macau), dotAsia Organization (Hong Kong) and other Hong Kong Internet leaders.

November 2010: Submission of winning government bid for the redesign and build of the .mo ccTLD. Primary technical areas of contribution were in network and server architecture.

February 2011: Was wholly responsible for the building and configuration of all servers, networks, and cabling across two datacenters for the new MONIC. This included design and implementation of the following services: distributed electronic mail (failover across 3 networks), web, VoIP (Asterisk – SIP/IAX2/SCCP), CRM, CMS, DNS, and office services (SMB and DHCP).

June 2011: Design and implementation of internal information portal based on the Drupal CMS.

September 2011: Ongoing enhancement of services, documentation, and training of new staff.

September 2013: Designed and implemented a remote network monitor solution which continually monitored and reported problems for HTTP, DNS, SMTP, and IMAP protocols.



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International Messaging Associates

Managing Director / CEO

Hong Kong May '94 – December '03

Director for the IMA group of companies. IMA customers included Fortune 500 and large government organizations worldwide. Key areas of responsibilities included market research, product development, and daily operations. Established the first Hong Kong office, in May 1994, providing core product development, technical support, sales, and production.

- ▶ Grew annual revenue from zero to almost US\$ 2M in the first two years of operation, without external funding.
- ▶ Guided the company through a successful private funding placement in 1999 (US\$ 2M).
- ▶ Chief architect for the *Internet Exchange Messaging Server*.
- ▶ Managed over 15 software product releases, including sales collateral and web updates.

Manila, Philippines, December, '97 – February, '03

Established IMA Philippines to provide English language technical support and technical writing capabilities. The scope of the office was later expanded to include software development, web site design, and marketing / sales functions.

- ▶ Established SEC registered company – grew from zero to over 50 staff within two years.
- ▶ Total management responsibility, including operations (network and office), staffing, administrative (including accounting), technical (support, development, sales, and technical writing staff), and legal.
- ▶ Established international call center facility in March 1998 to directly serve North American customers.

San Francisco, California, USA, January '93 – May '94

Founded International Messaging Associates (IMA), a new Internet software company specializing in electronic messaging solutions. The IMA gateway products for cc:Mail became the de-facto corporate standard solution in their market.

- ▶ Chief architect for the *Internet Exchange for cc:Mail* product, the first Windows based MIME compliant gateway for Lotus cc:Mail.
- ▶ Involved with the IETF working group responsible for developing the MIME Internet standard, now the basis for all structured messages used in Internet electronic mail and the World Wide Web.



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Siren Software Corporation

Consultant **Menlo Park, California, March '93 – February '94**

Chief architect for Siren Mail, a MIME-compatible email client for UNIX workstations.

AT&T

Consultant **Sunnyvale, California, January '91 – July '91**

Worked with the local AT&T staff and researchers at Bell Laboratories in the development of a fax based personnel data submission system. This allowed personnel managers at AT&T facilities to be able to submit standard forms via fax. Once received, the systems would automatically extract the pertinent information from the received image, integrating this with a back-end database system.

Worldtalk Communications

Consultant **Campbell, California, July '90 – February '93**

Worldtalk (formerly Touch Communications) was a leading OSI messaging server company. Key accomplishments:

- ▶ Provided Internet email training and assistance for the Technical Support group.
- ▶ Quality Assurance and testing for the Touch SMTP gateway.
- ▶ Wrote the Touch SMTP gateway manual and related documents.
- ▶ SMTP gateway and related modules program development and testing.

Lawrence Livermore National Laboratory

Consultant – Control Data Corporation **March '86 – May '90**

The Technology Information Systems Program at LLNL provided technology support for the US Air Force Logistics Command, among others. Was employed by CDC as a consultant to the TIS program. Key accomplishments:

- ▶ Design and implementation of enhancements to the TIS Electronic Mail system, a mail client widely used within the U.S. Government.
- ▶ One of the principal architects for the Livermore Advanced Network Computing Environment (LANCE), an OS independent environment for the creation of distributed applications.
- ▶ Program committee member: IFIP WG 6.5 International Conference on Message Handling Systems and Distributed Applications. Chaired the IFIP WG 6.5 Task Group on Gateways.



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Lawrence Livermore National Laboratory (cont)

- ▶ Actively involved with the National Institutes of Standards and Technology Workshops for OSI, MHS Special Interest Group.
- ▶ Design and implementation of a CDCMail gateway (Control Data project)

From February 1989 through June 1989, managed the ETA Systems on-site technical staff at the Tokyo Institute of Technology. Responsible for working with the customer in resolving technical issues related to their supercomputer installation.

The Wollongong Group

Software Engineer **Palo Alto, California, November '83 – March '86**

The Wollongong Group (TWG) was the first company to commercialize the TCP/IP protocols and applications used within the research and government networking communities (ARPANET). This network foundation was later to become the basis for most modern local area networks and the Internet. Key accomplishments:

- ▶ Portation of BSD TCP/IP stack for the IBM 370 series computers running UNIX System V.
- ▶ TCP/IP network stack and application porting to XENIX (Microsoft UNIX for the Intel 286), Plexus (Z8000 based), and AT&T 3B5 minicomputers.
- ▶ XENIX kernel serial I/O driver enhancements for Systech serial expansion boards.
- ▶ Established and maintained corporate electronic mail gateway.

Convergent Technologies

Consultant **Santa Clara, California, April '85 – March '86**

Designed and implemented a software development environment integrating configuration management / change control with build / installation automation for the AT&T UNIX PC release. This system allowed simple integration of software changes while at the same time ensuring build integrity and the ability to track module versions in released software.



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Forward Technology

Software Engineer Santa Clara, California, March '83 – November '83

Software / System engineer for a pioneer startup UNIX microcomputer company. Projects supporting the FTI 3000 and 500 UNIX computers included:

- ▶ SMD disk formatter design and implementation.
- ▶ Demonstration software for a new graphics system.
- ▶ Assisted with solving problems related to the manufacturing of the FTI computers.

Christian Rovsing Corporation

Software Engineer Thousand Oaks, California, March '82 – March '83

Designed software for the graphical presentation of telemetry data for a project transferring telemetry data between Air Force bases. Performed cost performance trade-off analysis of various graphics terminals used on the project.

Bunker Ramo Corporation

Digital Design Engineer Westlake Village, California, Jan '81 – March '82

While working in the Ocean Surveillance Group:

- ▶ Software design for MTR signal processing studies
- ▶ Design and implementation (hardware and software) of the ERAPS Command Generator (a microcomputer controlled radio transmitter)
- ▶ Maintenance and modification of the ERAPS Avionics chassis.