

# Adrian R Kingston

## Telecommunications Software Engineer

Phone: 410 490 9328  
[www.AdrianKingston.com](http://www.AdrianKingston.com)

### PERSONAL DETAILS:

Male, age 46, married with no children, United States Resident Alien (Green card holder), British citizen, living in the United States since 1995. Hobbies include motorcycling, RV travel, jet-skiing, electronics, Hi-Fi and real estate investing.

### EXPERIENCE OVERVIEW:

I started in Telecommunications with British Telecommunications (BT) in 1979 completing a three year apprenticeship covering all aspects of telecommunications engineering. After reaching management level in BT, I moved to Ericsson Ltd. to further my software ability in TDM SPC switching systems and ended up with Ericsson in Richardson TX. After being invited to take a position with Lightspeed International (a startup), I worked on the new Lightspeed Transpath 2000 product inventing & designing the Lightspeed Call Module (LCM) and both DPNSS and ETSI PRI protocols for Lightspeeds first lab demo in 1996. Lightspeed was subsequently acquired by Cisco Systems Inc, and I worked on designing & coding their SC2000/PGW signaling controller/softswitch product derived from the Transpath 2000 and I am a co inventor of two patents that relate to that product. I also worked on the BTS10200 softswitch at Cisco. More recently I was invited to join AppTrigger (a startup) in Richardson TX working on their Ignite product implementing SIP to INAP/CAMEL interworking for next generation network interconnect which now gives me almost 30 years of experience in international telecommunications switching systems and protocols.

### SKILLS:

Telecommunications switching system software design, state machine design, real time process design, software coding, unit, integration & system test, software support, network protocol design, intelligent network (IN/AIN/CAMEL) protocol and service (SCP service scripts) design, compiler preprocessor design, Rational Rose object oriented design methodologies & telecommunications network management.

### SOFTWARE:

Ericsson High Level (OOP) PLEX, PLEX / ASA, C / C++ (Borland, Microsoft Visual C++, GNU & Sun Solaris), 8031 ASA, Microsoft Windows, Unix, Cisco MDL & AppTrigger VRPL.

### PROTOCOLS:

ETSI PRI, ANSI SS7 ISUP, ITU Q767 C7 ISUP, ITU Q761 C7 ISUP (and the many variants there of), ANSI NI-2 PRI, DPNSS, BT-NUP, ASN.1, Ericsson INAP 2.0, CS-1/2 INAP, CAMEL, ITU TCAP, ANSI TCAP. Some MGCP & SIP experience.

### HARDWARE PLATFORMS:

GPT System X TDM Local Exchange Switching System  
Ericsson AXE10  
Sun SPARC

Cisco SC2200 / PGW  
Cisco BTS10200  
AppTrigger Ignite

## **WORK EXPERIENCE:**

**COMPANY:** AppTrigger Inc. Richardson TX USA  
**TITLE:** Senior Member of Technical Staff (Engineering Software Design)  
**FROM:** 2007 to 2008  
**JOB DESCRIPTION:**

Design and implementation of INSCS (Intelligent Network Service Capability Server) to interwork SIP (IM-SSF) to legacy INAP and CAMEL SCP based services with XML based scriptability for support of custom INAP and CAMEL messages and parameters.  
Design and implementation of CCXML Engine and CCXML scripts to support conferencing services. Writing C++ applications using the AppTrigger Transparent Exchange platform to implement FSM state machines, serializable message classes and VRPL visible data members and functions with Transparent Exchange meta-classes. Implement unit and integration tests using the AppTrigger API Test Harness with VRPL scripts to test SIP to INAP and SIP to CAMEL interworking down to detailed parameter value mapping.

**COMPANY:** Cisco Systems Inc. Herndon VA USA  
**TITLE:** Technical Team Leader (Engineering Software Design)  
**FROM:** 1998 to 2006  
**JOB DESCRIPTION:**

Design and implementation of OLM (Overload Manager) driver threads for load management project in BTS10200 release 5.0 plus unit/integration test and load management modeling.  
Lightspeed MDL (Message Definition Language ) code writer for many telecom protocols.  
Invention, design and implementation of updated #IFDEF/#IFNOTDEF MDL preprocessor.  
Invention, design and team lead for implementation of MDL protocol code base reusability using #IFDEF to support ISUP variants using a common minimal code base by #IFDEFing by protocol function.  
Re architecting MDL ISUP codebase for the BTS10200 product.  
Coding MDL parsing rules from industry standard protocol specifications for ISUP variants.  
Merging protocol state machine requirements with specific PGW/BTS requirements especially with regard to ISUP COT.  
Producing simulation scenarios from protocol specifications for module unit tests.  
Analyzing fault reports from software integration test, system test and customers.

**COMPANY:** Lightspeed International Inc. VA USA  
**TITLE:** Senior Software Engineer  
**FROM:** 1996 to 1998  
**JOB DESCRIPTION:**

Designing new implementations from scratch and working in a startup environment.  
Architectural design and documentation of the Lightspeed Call Model (LCM) in Transpath 2000.  
Design and documentation of many MDL (Message Definition Language) program constructs.  
Design and implementation of the Transpath 2000 Call Context call data hierarchy.

Invention of the concept and subsequent implementation of “Newness” of call data in Call Context to provide event independent single transfer of protocol data between differing protocols.  
Coding MDL parsing rules from industry standard protocol specifications.  
Coding MDL state machine logic from industry standard protocol definitions.  
Merging protocol state machine requirements with specific Transpath 2000 requirements.  
Producing simulation scenarios from protocol specifications for module unit tests.  
Analyzing fault reports from software integration test, system test and customers.

**COMPANY:** Ericsson Network Systems Inc. Richardson TX USA  
**TITLE:** Customer Service Specialist II  
**FROM:** 1995 to 1996  
**JOB DESCRIPTION:**

Responsible for AXE10 AS36 International Gateway exchange support for 4 customers.  
In depth investigation of faults on working systems on a 24-hour basis.  
Producing assembler level patch solutions to solve faults in short timescales.  
Software tracing of call processing faults in “Real Time” at operating system level.  
Solving MTP, SCCP, TCAP, ISUP, TUP & INAP protocol faults at bit level.  
Preparing detailed documentation on switch & Network management & data issues.

**COMPANY:** Ericsson Ltd. Burgess Hill UK  
**TITLE:** Senior Support Engineer  
**FROM:** 1991 to 1995  
**JOB DESCRIPTION:**

Responsible for AS36 Intelligent Network Support.  
Solved SCP Service Script logic and data faults in complex IN services.  
Designed Service Script updates to solve customer fault reports.  
Loaned to British Telecom (Concert) GNMC in Atlanta to train BT in IVN fault finding.  
Produced Windows program to interpret TCAP/INAP messages in AXE10 traces.  
Gave presentations & training on Intelligent Networking to BT GNMC engineers.  
Designed implemented and setup an ETRANS trouble reporting system for Ericsson.

**COMPANY:** British Telecom Ltd. London UK  
**TITLE:** MPG2 Manager, AXE10 Product Support BTHO London  
**FROM:** 1989 to 1991  
**JOB DESCRIPTION:**

Responsible for validation of AXE10 upgrade enhancement procedures for BT.  
Specialist in AXE10 Subscriber Services and Subscriber Switching Stage.  
Responsible for managing stoppage situations and high cost issues for BT.

**COMPANY:** British Telecom Ltd. Cambridge UK  
**TITLE:** Apprentice / Switch Technician / Technical Officer  
**FROM:** 1979 to 1989  
**JOB DESCRIPTION:**

Worked with Strowger, FDM, and PCM transmission, GPT System X & Ericsson AXE10.  
Completed 3 year apprenticeship covering all aspects of BT engineering.

**PATENTS:**

Feature Transparency In A Telecommunications Network (Patent No. 6,650,632)  
Protocol Conversion Using Channel Associated Signaling (Patent No. 6,151,390)

**EDUCATION:**

British Technical Education Council Certificate in Telecommunications  
Cambridge College of Arts & Technology  
General Certificate of Education (O-Level)  
Mathematics, Technical & Mechanical Drawing, Electricity & Electronics, Engineering Science,  
Computer Studies, English Language.  
Cottenham Village College 1978 / Cambridge College of Further Education 1979  
Many British Telecom / Ericsson / Cisco Systems, system & industry specific trainings.