



**Marcel Schoenenberger, Principal Consultant,  
McSquared System Design Group Inc.**

Audio/Visual, Collaboration & Simulation Training  
Systems Technology Design Consultant

Years of Experience: 28 years, 16 years in Current  
Consulting Role.

**Profile:**

In his 28-year career in Switzerland, Canada and worldwide, Marcel's responsibilities have involved the design and integration of enterprise level technology solutions including, sound, videoconferencing, audiovisual, collaboration, distance education, digital signage and control systems for a wide variety of type of applications ranging from courtrooms, conference rooms, to classrooms and medical simulation training centers.

His experience in understanding usage modality provides a key benefit allowing Marcel to develop innovative and creative solutions to the challenges of performance and functional requirements, operational requirements, and budget resources.

For the past 16 years Marcel has specialized in the development of enterprise level secondary and post-secondary institutional and corporate educational type systems, including distance education enabled systems used for collaboration among remote sites.

Another area of focus has been the development of integrated systems in the field of medical simulation training systems, integrating the functional and performance requirements of the A/V systems, the capturing and debriefing systems and the human patient simulation systems into one easy to operate, fully functional & reliable simulation training system.

One of Marcel's core areas of expertise is the development of new and innovative collaboration technology solutions designed to support emerging teaching & learning, conferencing & Collaboration methodologies.

**Education and Qualifications:**

Diploma, ZNM Zuerich Switzerland Broadcast Video  
System Engineering

**Post Graduate Studies:**

- ZNM Video component technology certification
- SONY Advanced video system design certification –  
Sony Development Center Atsugi, Tokyo, Japan
- Panas. Panasonic CCVE System design & application  
certification
- BARCO Component Level Light Cannon projector  
technician certification
- BSS Soundweb Factory certified Design &  
application
- AMX Control system design & application  
certification
- CCTC Computerized Sales & Marketing  
Certification
- BCIT AutoCAD level I & II certification
- Netcor TCP/IP & PC Networking  
System design & application certification
- ICIA CTS, International Communications  
Industries Association Certified Technology  
Specialist
- Crestron Essentials of Crestron Programming
- EASE Enhanced Acoustical Simulation for  
Engineers Special EASE 4.5 design program  
level 1 & 2 certification
- Extron HD-BaseT, XTP Engineering Certification
- Extron Advanced Video & Streaming Technologies  
Certification
- Cisco Videoconferencing System C-series platform  
Design Certification
- Biamp AUDIA DSP Design certification
- SynAudCon Audio Program certification
- Salitek MPDP Design & Installation Certification

**Employment History:**

- 2001 to current, Principal Consultant, McSquared  
Systems Design Group Inc.
- 1996 – 2001 TELAV / I.S.T.S. Inc, Vanc.
- 1995 – 1996 NEC Switzerland/Japan
- 1989 – 1994 AV Ganz AG, Switzerland
- 1986 – 1989 Mountaineer Forces, Swiss Military,  
Switzerland

**Associations:**

- ICIA, International Communications Industries  
Associations
- SynAudCon, Synergetic Audio Concepts
- SimGhosts – Healthcare Simulation Technology  
Association

## Relevant Experience and Capabilities:

*Northern Alberta Institute of Technology (NAIT),  
Centre for Applied Technology (CAT), Edmonton, AB*

Design of enterprise level, building wide, fully integrated education A/V Systems, for teaching, learning and collaboration spaces such as lecture theatres, classrooms, health teaching labs, applied sciences teaching labs, meeting & conference rooms, student commons, and medical simulation center. The A/V systems include videoconferencing & Presentation systems, digital signage systems & medical capturing & centralized debriefing content management systems (MCDS) and Ethernet network. Medical training simulation Centre systems include the integration of Laerdal, Gaumard and CAE human patient simulators for patient vital sign and user data collection with the ethernet network, A/V & the MCDS systems.

Completed: October 2016  
A/V technology Systems value: \$ 5 Mio

*Royal Jubilee Hospital, Victoria, BC*

Design of high definition, fully digital, distance education, and capture and de-briefing enabled A/V systems, including 35-seat seminar room, 16-seat seminar room, meeting & collaboration spaces, medical simulation theatres with adjacent observation rooms, medical training labs and clinical seminar rooms.

Completed: Jan 2015  
A/V technology Systems value: \$ 1.5 Mio

*UHNBC, Clinical Academic Campus,  
Prince George, BC*

Education Technology Design Lead for 'flipped lecture' teaching & learning classroom modality. Design of high definition, fully digital, distance-education enabled collaboration AV systems, for the new distributed Medical Program campus, including a 72-seat multipurpose seminar room, a 35-seat seminar room, central technology control room and multiple meeting & collaboration rooms.

Completed: June 2015  
A/V technology Systems value: \$ 1.5 Mio

*Hospital for Sick Children, Centre for Research and Learning, Toronto, OT*

Design of enterprise level, high definition, fully digital, distance education enabled education AV systems in 350-seat LT, large and medium conference & collaboration spaces, meeting rooms & hospital emergency operations centre.

Completed: November 2013  
A/V Technology systems Value: \$ 3.5 Mio

*Surrey School District, SD-36, Resource Education Centre & District Wide Secondary Schools Unified Media Communication Systems (UMCS)*

Design of high-definition, five screen based multi-purpose conference center A/V system including sound & control system and capturing and streaming system. Development, Prototypical Testing and Roll-out of Unified Media Communication systems to all 25-district wide secondary schools, the District Education Centre and the District Resource Centre. The Development, design, prototypical testing and district wide roll-out of the Unified Media Communication systems UMCS, incorporates communications to student & staff smart devices, the school and DEC/REC public displays and provides the district with immediate, district wide communications capabilities for emergency notification purposes.

Completed: September 2016  
Technology systems Value: \$ 2 Mio

*UBC, FoM, MPAACT Distributed. Medical Program, BC*

Development user requirements, performance guidelines, conduct usability studies & design of distance education enabled AV systems used at over 100 university and Clinical sites throughout BC for the remote education of the Distributed undergraduate BC Medical Program.

Completed: Since 2002, projects ongoing.  
Technology System Value: \$ 56 Mio

*Langara College, New Science & Technology Building, Vancouver, BC*

Design of high definition, fully digital, advanced A/V systems, for lecture theatres, classrooms and meetings rooms. Design of fully integrated A/V observation, capture and debriefing systems for the new Nursing Simulation training centre, including integration of the human patient simulators vital sign and user data, and the provision for standardized and confederate training scenarios. Development and design of customized integrated Medical Capture and De-brief systems (MCDS).

Completed: Jan 2017  
A/V technology Systems value: \$ 1.5 Mio

*Centre for Excellence in Surgical Education, CESEI, VGH, VCH, Vancouver, BC*

Design of high definition, fully digital, distance-education, capture and de-briefing enabled AV systems for the CESEI surgical wet simulation lab and the 50-seat seminar/conference room.

Completed: January 2013  
A/V Technology systems Value: \$ 1.5 Mio

**M<sup>C</sup> Squared System Design Group, Inc.**

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