# **CARL (MIKE) DANIELSEN**

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#### **STRENGTHS**

Based on StrengthFinder 2.0 (Full report available by request.)

- Maximizer I make every project I am involved with go from strong to superb.
- Futurist I create the future and inspire others with my vision.
- Relator I work well with others to achieve a common goal.
- Strategic I find new and unique ways to proceed when faced with difficult problems.
- Ideation I provide original ideas to solve complex problems.

### **SKILLS**

IP Management and Innovation Leadership System Architecture and Integration Clean Code and Design Effective Team Leadership Project Management Adapts Quickly to New Technologies Simplifies Solutions to Complex Problems Develop New Methodologies Excellent Presentation Skills Schedule Time Reduction

**Computer Skills:** Java, C++, PHP, Javascript, MySQL, OpenSim and Second Life scripting, Unity 3D(C#), Photoshop, Premiere, Modo, Microsoft Office

#### PROFESSIONAL EXPERIENCE

THWAKK INC. 2011 to present

Developed, managed and executed a technology plan for migrating Virtual World codebase from a Second Life environemnt to OpenSim and Unity platforms. Optimized OpenSim software to run 20 times faster. Created new learning experiences in Unity 3D, JavaScript, PHP and MySQL. The program has been successfully deployed to several customers across the US and Canada.

#### **COGNIZANT TECHNOLOGICAL SOLUTIONS**

2009 to 2010

Leader in Virtual World development. Created virtual learning center in 3D virtual world with over 70 interactive exhibits. Responsible for all training, leadership and collaboration for global team. Provided scripting in LSL (Linden Scripting Language), PHP, JavaScript and MySQL. Learning center provides state of the art online learning for over 700 professionals.

### MOTOROLA, Schaumburg, Illinois

1984 to 2008

**Primary role:** Developer of Multimedia technologies including video communications, avatars and virtual worlds. Integrated circuit design, hardware and software design and system architect.

Distinguished Member of the Technical Staff (1996-2008)

### Virtual World and Avatar Program Manager (2007 to 2008)

Provided thought leadership and guidance to many different parts of Motorola. Recognized as the authority and a visionary in the area of Virtual Worlds within Motorola.

- Created collaborations among various project teams across Motorola to provide advanced solutions in virtual worlds and avatar based communications.
- Developed use cases for enterprise and health industries utilizing virtual worlds.
- Created a working virtual prototype of a virtual warehouse in Second Life to demonstrate the concept of virtual experience prototyping. Developed new ways to solve problems.
- Managed company wide portfolio of patent disclosures and filings in the area of avatars and virtual worlds. Avatar and virtual world patent filings and issues grew ten-fold over this time.
- Represented Motorola to outside corporations in the area of virtual worlds and was an active member of the Virtual World Interoperability Forum. Presented Virtual World trends and concepts to Vodaphone (Italy), Link Dot Net (Egypt), Turner Broadcasting, Stanford University and other organizations. Resulted in new projects started with external business partners.

#### Avatar Project Lead (2004 to 2007)

Provided project leadership, software architecture and development. Developed collaborations internal and external to Motorola. Demonstrated technology and benefits of avatars and virtual worlds.

- Led the development of an Avatar Framework which demonstrated the feasibility of avatar facial animation to enhance audio communications by emotive expressions and lip sync. Demonstration of the first new communications medium in 80 years.
- Integrated framework with real time speech analysis and text to speech engines.
- Created avatars on request for high level presentations for corporate CEO and VP's.
- Used Avatar Framework to enhance kiosk developments.
- Created an efficient programming interface that allowed existing and new applications to easily add avatar functionality.
- Led development of Avatar Chat demo which provided two way avatar interactions over a 3G cellular voice call. The demo that excited all those who saw it and was the first call of its type in the history of telecommunications.

### Media TV Project Lead (1996 to 1999)

System architect and project lead of Media TV chip. This was a MPEG-4 high definition video decoder plus integrated 3D graphics, ideally suited for interactive TV.

- Led development of a high end MPEG-4 video decoder and graphics processor.
- Provided expertise in video chip architecture and methodology. Refined the architecture developed from Cheetah (see below) and applied it to several video chips in development including the chip which powered Motorola's first mobile video phone.
- Developed requirements.
- Created architecture and modular specifications.
- Managed a team of six engineers.

# Cheetah Project Lead (1994 to 1996)

The Cheetah project was the development of Motorola's first successful two way video communications chip. The chip enabled video communications over normal telephone lines. A working prototype was demonstrated exactly one year after the project team was formed and 3 months later, first silicon was received and was fully functional. This was an exceptional achievement considering the time constraints and complexity of functionality provided. When it was completed the chip provided best in class performance at typical power levels.

- Project leadership. Coordinated development between Schaumburg and Austin teams. Managed a team of 11 engineers. Half of the team had never designed an integrated circuit before.
- Developed new design methodology combining high level synthesis and rapid design prototyping which greatly reduced cycle time and simplified design. The design methodology was used in future projects.
- Developed new architecture that made the design more reliable and easier to verify. Created the schedule of operations that occurred within the chip. The architecture proved so successful it was used in several follow-up developments.
- Successfully transferred project to product group.

# Other Projects at Motorola

- Telepresence project Developed multimedia router and player for system to demonstrate virtual communications and seamless mobility of content for the first time at Motorola.
- GSM Exec Provided Motorola's first multi tasking operating system executive that was released in millions of early GSM mobile phones.

### **EDUCATION**

National Technological University MSCE, Computer Engineering,

Michigan Technological University BSEE