
Michael Walker

Orlando, FL - mike@michaeltwalker.com

SUMMARY OF QUALIFICATIONS

- Extremely enthusiastic and hardworking individual able to quickly learn and apply new information in individual and team environments comprised of both technical and nontechnical members while leading teams on time-critical projects.
- Software development with programming background in C, C++, C#, VB, .NET, HTML, CSS.
- Working knowledge of Windows Forms and WPF with strong background in user-friendly UX designs.
- Experience in engaging users in gaming environments, math and science training, and event volunteering.
- Extensive management experience in coordinating and training of volunteers and employees of various technical abilities.
- Strong knowledge base of bleeding edge technology, cloud computing, collaboration, training, and mobile device development.
- Proficient in AutoCAD, Autodesk Inventor, Solid Edge, Solid Works, Adobe Creative Suite, Microsoft Office Suite, Visual Studio, etc.
- Background in mechanical design, prototyping, fabrication, evaluation, and quality and efficiency improvements.
- Ability to convey technical concepts to non-technical audience through inspirational presentations and educational materials.

EXPERIENCE HIGHLIGHTS

FIRST Robotics Competition, Orlando, FL – Volunteer Coordinator, <http://www.usfirst.org> *September 2001 – Present*

- Manager of finals field as volunteer coordinator at the annual Atlanta International Championship. The 2008 event hosted over 30,000 students and included political figures such as George H.W. Bush, numerous governors/representatives/senators, and corporate CEOs (Boeing, Google, etc.).
- Florida Regional Planning Committee Member to plan and execute annual competition hosted at the University of Central Florida with over 5,000 participants. Committee consists of representatives from NASA, Disney, Siemens, and UCF.
- Mentor students to design and build a robot to compete in a game designed to encourage mechanical design, programming in C/C++ languages, and mechatronics. Agents are controlled via teleoperation and closed loop automation through sensor feedback.
- Creation of C#/.NET based tools for Florida offseason events to use for event management and team ranking systems.
- In charge of recruitment, training, coordination, and retention of 150+ volunteers for annual Florida FIRST Regional.
- Team communications liaison to handle human relations between regional committee and Florida teams and offseason events.
- Volunteer more than 30 hours per week every January, February, and March mentoring high school students in design, fabrication, assembly, and programming of 120lb robots to compete in task-based competition
- Event manager and technical advisor for several official and offseason events in Florida.
- Published official “Introduction to Programming Guide” document for FIRST available for 1000+ teams to train students and mentors in techniques to get started with supplied robot control system and begin developing efficient code.
- Provide programming mentoring, support, and debugging for teams through online forums and instructional materials.
- Author of technical documents teaching theory and practical applications of sensors and algorithms in robot automation.

UCF Institute for Simulation and Training, Orlando, FL – Research Assistant *April 2007 – April 2009*

Applied Cognition and Training in Immersive Virtual Environments Lab - <http://active.ist.ucf.edu>

- Developed C#/.NET based tool for parsing multiple gigabyte text file databases containing human performance data into SQL databases. Creation of a simulation and data comparison interface for data playback and analysis by researchers.
- Assisted development and technical documentation of C++ library implementation of Joint Architecture for Unmanned Systems (JAUS), a developing military communications standard for interfacing and control of unmanned air, water, and ground agents.
- Designed a compact x86-based Unmanned Ground Vehicle (UGV), capable of working within mixed reality environments and conforming to JAUS standards to be controlled by various Human-Computer Interaction (HCI) devices (Joystick, Wiimote, etc) to perform operations in a mixed reality maze-like game where users search for insurgents remotely.
- Assisted in managing Army Research Lab (ARL) funded study researching the relation between varying levels of system automation and human workload, specifically in regards to operator control stations for UGVs performing reconnaissance.

Serious Games Research (RETRO) Lab – <http://www.seriousgamesresearch.com>

- Researched ways to better engage users in a serious gaming environment and to maximize users’ desire to train multiple times.
- Design, execution, and evaluation of studies on reducing costs and improving immersion in simulations and serious games.
- Research of techniques to improve collaboration among soldiers, researchers, and instructors through development of communities of practice and various emerging commercial web tools.

Imagine Creative Technologies, Orlando, FL – Developer, www.teqgames.com *March 2009 – October 2009*

- Development of curriculum and simulation missions to train people in a virtual flight school environment while actively engaging them in a realistic gaming environment with Microsoft Flight Simulator X.
- Creation of .NET-based show ready simulator controllers for school and museum environments.

EDUCATION

University of Central Florida, Orlando, Florida – Industrial Engineering

Fall 2005 – Spring 2011