

Michael Kovalerchuk

Software Developer

Seattle, WA - Email me on Indeed: [indeed.com/r/Michael-Kovalerchuk/136a47b15c9df39e](https://www.indeed.com/r/Michael-Kovalerchuk/136a47b15c9df39e)

Years of Programming Languages: C/C++ (since 1992), Java (since 1996), Visual Basic (since 1997)

Years of Programming Language Experience as of 2016:

(C/C++, 24 years of C/C++-> [...]

(Java, 20 years of Java-> [...]

(Visual Basic, 19 years of Visual [...]

Willing to relocate: Anywhere

Authorized to work in the US for any employer

WORK EXPERIENCE

Software Developer

BKF Systems - Seattle, WA - December 2005 to Present

Job Skills and Responsibilities:

C/C++, OpenGL, ArcMap, Basic Matlab/Octave, Fortran, Java.

Developing models and software for Geospatial and Missile Defense tasks in multiple projects funded by DoD.

Lead developer in an MDA SBIR Phase II on track correlation/sensor netting. Several research publications at SPIE, and other related publications in these areas. (See the publication section above).

Latest R&D project at BKF systems is an N-Dimensional data visualization application, written in C++ and using OpenGL. (OpenGL_Sim.exe)

Software Developer / Co-founder

Inventworld Corp. - Seattle, WA - January 1999 to Present

Job Skills and Responsibilities:

C/C++, Windows GUI, HTTP Protocol,

Audio/Video Compression, Streaming, HTTPS, OpenSSL, Javascript, IOS, Android, PHP, MySQL.

Software Developer / Research Associate

Central Washington University - Ellensburg, WA - February 2003 to December 2005

Job Skills and Responsibilities:

Lead developer/primary developer of the Area Ratio based algorithm and software (ESRI ArcMap Plugin) for image registration.

Imaging Lab Web page with demo version of the Algorithm (as ArcMap Plug-in) available for download.

http://www.cwu.edu/~Imaglab/Programs/ARC_Plugin/ARC_Plugin.html

Software Developer

Central Washington University - Ellensburg, WA - February 2001 to February 2003

Job Skills and Responsibilities:

Developing 3D visualization application using OpenGL. (DiscTree.exe)

Developing Text iconization tool. (Iconizer.exe). Takes a list of icons and a plain text file. Produces an HTML file which is an icon presentation of the text or text with icons.

Developing a tool for automated downloading of icons from the web. (Icon_getter.exe)

Developing a tool to extract vector presentation (recognize features) out of a bitmap image. (Vectorizer.exe)

Software Developer in Test

Attachmate Corp. - Bellevue, WA - June 1997 to October 2000

Job Skills and Responsibilities:

Automated software testing of network software, Test Tool development under Windows NT, ActiveX development, Web development.

SNA Protocols RUA, LUA, GAP32 (Gateway Access Protocol, Attachmate's Proprietary Protocol), WebServerLoad (WebTester),

Software Developer

WildTangent Inc. - Redmond, WA - June 1999 to July 2000

Job Skills and Responsibilities:

Debugging and enhancing JavaScript Games ("Asteroids, Monster Truck"), written on top of WildTangent's "WebDriver" 3D rendering engine. Adding a new sphere primitive to the "WebDriver." (Involved creating a polygonal sphere model).

Development of sound playback capabilities for the WebDriver (Wave Player, ADPCM Player, MIDI Player, MP3 Player) Optimization of the original ISO source code of the MP3 Decoder. Development of sound playback Javascript samples written on top of the WebDriver.

EDUCATION

Bachelor of Science in Computer Science

Central Washington University - Ellensburg, WA

September 1997 to March 2000

SKILLS

C/C++ (10+ years), Java (10+ years), Visual Basic (10+ years)

AWARDS

CWU merit scholarship

Congressional Youth Leadership Council scholar

PUBLICATIONS

10+ publications, including:

Modeling spatial uncertainties in geospatial data fusion and mining

2012

1. Boris Kovalerchuk (PhD), Leonid Perlovsky, and Michael Kovalerchuk, Modeling spatial uncertainties in geospatial data fusion and mining, SPIE Proc., 8396 – 24, pp.1-10, 2012.

Robust and affine Invariant Image Fusion: Algorithm and ARCGIS Plug-In

May 2006

3. Kovalerchuk. B., Kovalerchuk, M., Sumner W., Robust and affine Invariant Image Fusion: Algorithm and ARCGIS Plug-In, In Proc. of ASPRS annual conference, 2006, Reno, NE, May 2006.

Image Conflation and Change Detection Using Area Ratios

April 2005

4. B. Kovalerchuk, M. Kovalerchuk, W. Sumner, and A. Haase, Image Conflation and Change Detection Using Area Ratios, SPIE Defense and Security Symposium, Orlando, FL, 28 March - 1 April 2005

ADDITIONAL INFORMATION

Skills (keywords): Conflation, data fusion, computer vision, data mining, machine learning, deep learning, C#, Unity 3D engine.