

Michael Vaganov (michael.vaganov@gmail.com)

Summary

Sr. Level software developer with teaching and technical mentoring experience. 8 years of teaching undergraduate game development in C++, in highly technical and highly practical 8-week courses, and guiding final projects. Focused on performant code and systems development. 5 years Teaching Unity 3D game/VR development. Professionally implemented garbage-collection, socket networking code, and a domain-specific web-browser, on pre-smart-phone mobile.

Skills

- **20+ years Programming:** hobbyist, game programmer, educator, consultant
- Programming Languages: **C, C++, C#, Java, JavaScript, Python**
- Software Domains: games, productivity & automation, UI/UX, multi-platform, client/server, VR, Web, ANN
- **15+ years Teaching Computer Science:** ages 7 to 40+, as a tutor, undergrad professor, and high-school teacher

Portfolio

- Projects: <http://www.codegiraffe.com/portfolio/>
- Code Samples: <https://github.com/mvaganov/>

Employment History

Computer Science Teacher at Sacred Heart Prep

(Aug. 2015 to Jun. 2019) Faculty member at an exclusive private school.

- Teach computer science, with a curriculum designed to motivate in a context of creativity and computer hacking
- Subjects: Computer Science fundamentals, HTML/CSS, Python, JavaScript, C, C++, C#, Unity, VR, computer graphics, photoshop, 3D modeling, 3D printing, electronics, cyber security, tech industry culture
- Wrote software used to manage schedule and notification using speech synthesis
- Wrote Artificial Neural Network from scratch using C# as a learning exercise

Code Coach at theCoderSchool

(Sep. 2014 to Aug. 2015) Elite Computer Science education for youth (between age 7 and 17) in the Silicon Valley.

- Custom-built tutorials for: Unity, C#, C and C++, Java, Blender, 2D/3D math, Game Design, Project Management

Self Employed Programmer, Entrepreneur

(Dec. 2012 to Present) Personal moonshot, and consulting services including prototyping and technical planning.

Professor at DeVry University (Silicon Valley Campuses)

(Mar. 2006 to Dec. 2014) Professor of Games and Simulation Programming (GSP), a Computer-Science-like Bachelors of Science degree program, with emphasis on game development.

- Rated highly in students evaluations (consistently 3.5+ out of 4), despite having [difficult classes](#)
- Focused on teaching performant code and game development in C and C++
- Taught and evolved course content: programming, data structures, practical software architecture, computer graphics, AI for games (expert systems), project management, design
- Managed 30+ Senior Project teams (16 week projects, 2 to 5 programmers /team with varying skill levels)

Software Engineer at LimeLife

(Nov. 2006 to Apr. 2008) Developer responsible for end-to-end network-aware flip-phone mobile application development.

- Senior-level engineer: product development, build-systems and automation, client/server
- Fully automated heavily manual build process requiring test-activity to seed meta-data, saving hours-per-day for build engineers
- Created DRM (Digital Rights Management) abstraction layer, implementing both client and server side code
- Implemented garbage-collection and a domain-specific web-browser for "ALE", a (quite impressive) wide-porting/localization/multi-platform, multi-lingual (C++ and J2ME) API and build system. Created for flip-phones, ALE's build system could notably compile a J2ME program into BREW C++ for any target device known by the system.
- A responsible part of shipping 5 distinct mobile titles, and many SKUs of each

Software Engineer at Infospace Mobile Games

(Dec. 2004 to Nov. 2006) Developer of mobile applications with emphasis on client/server interaction.

- Senior-level engineer: product development, framework, R&D, client/server
- Implemented and debugged multiple proprietary asynchronous client/server products
- Conceived and implemented original scriptable UI engines for mobile and created associated compilers and virtual machines
- Lead development of a social-media photo-blogging application that was shelved by management
- Created a client/server test app used for system testing and engineer training
- A responsible part of shipping 5 distinct mobile applications, and many SKUs of each

Porting Engineer at Atlas Mobile (later purchased by Infospace)

(Jun. 2004 to Dec 2004) Very productive first-6-months-of-professional-software-development.

- Client side QA developer, primarily tasked with porting and bug fixing
- Identified as a 'BREW expert' by technical management, 6 months after learning BREW
- A responsible part of shipping 5 "For Prizes" mobile titles, and 30+ SKUs of each

Education

Keller Graduate School of Management

(Sep. 2006 to 2010) Masters of Project Management

DeVry University

(Jul. 2001 to Oct. 2004) BS of Computer Information Systems

Other

Volunteering

- Computer Science Teachers Association: Silicon Valley CSTA chapter President since Jan. 2018 (Jan. 2017 to Present)
- Unityversity: nearly weekly classes teaching Unity and VR (Aug. 2016 to Present)
- Citizen Schools: public school outreach (Feb. to Apr. 2014, Oct. & Nov 2013)
- Coder Dojo Silicon Valley: conference-style tech meetups for kids (Sep. 2013 to 2017)
- Guest Lecturer at various universities in Uganda (Oct. & Nov. 2012)

Hobbies

- Hiking, Biking, Rock Climbing, Fencing
- Software Side-projects, Game Jams, and Hackathons