Michael Vaganov (`michael.vaganov@gmail.com`)

Summary

Sr. Level developer who enjoys the challenges of writing efficient code and 3D user experiences. Has been teaching Unity 3D game/VR development. Implemented garbage-collection and socket networking code for a domain-specific web-browser on pre-smart-phone mobile. Developed wide-porting/localization/multiplatform/multi-lingual API/Framework and build system for mobile. Focused on teaching performant code and game development in C and C++.

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

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 simple and engaging tutorial content for Computer Science and electronic art
- Subjects: Unity, C#, C and C++, Java, Blender, 2D and 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 project, 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