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

Summary

Senior level software developer with teaching and technical mentoring background. 8 years of teaching undergraduate game development in C++, in technical and practical 8-week courses, and guiding final projects. 4 years teaching CS K-12, primarily at the High School level. 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, client/server, VR, Web, ANN
- **15+ years Teaching Computer Science**: ages 7 to 40+, as tutor, undergrad professor, high-school teacher

Portfolio

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

Employment History

Director of Engineering at Lightside Games

(*Jun. 2019 to present*) Ranking software developer at a distributed mobile games studio

- Developed proof-of-concept software prototypes with Unity
- Planned engineering culture and advancement track for engineers, including review process
- Vetted external contractors responsible for bulk game development
- Collaborated with lead designer to plan product pipeline, including concept market-testing
- Represented company at conferences and industry meetups

Faculty at Gamebridge Unityversity

(*Aug. 2016 to present*) Lead weekly Virtual Reality / Game Development workshops

- Responsible for Unityversity's Santa Clara Central Park Library location in Santa Clara, CA
- Improvisational tutorials about: programming, game design, software development, math, 3D modelling, digital art, other tech.

Computer Science Teacher at Sacred Heart Prep

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

- Taught computer science, with curriculum designed to motivate with 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 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 (Member: Jan. 2017 to present, President: Jan. 2018 to Sep. 2019)
- 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