Kya

https://kya.garden | talk@kya.garden

ABOUT

Nine years experience in low-level software development and DevOps. **Five** years experience in leadership. Passionate about creating meaningful experiences through software.

Strong experience in leadership roles, project ownership and client communication.

Technical expertise in C++, C, C#, full stack web, Unix-like systems, cloud computing platforms.

Variety of personal projects with computer graphics, video games, community event management, web design and mobile applications.

EDUCATION

MCOMP GAMES COMPUTING
University of Lincoln
2011 – 2015
1st at Bachelor's, Merit at Master's

MODULES
Computer Graphics
Games Programming
Computer Vision & Robotics
Social Computing

BTEC INTERACTIVE MEDIA
New College Stamford
2009 – 2011

Adobe Suite • Photography •
Video production • Animation

SKILLS

BACK-END
Modern C++ • C • C# • Java

WEB
Lua • JavaScript • Apache • nginx •
.NET • MySQL • AWS • Azure

LIBRARIES & APIS
Modern OpenGL • Emscripten •
XNA • MonoGame • Pandoc • Qt

ENVIRONMENT
Linux • Git • Docker •
Vim • Visual Studio • Valgrind •
DroneCI • Jenkins • Gerrit

EXPERIENCE

LEAD DEVOPS ENGINEER
Jan. 2019 – present

Led the implementation of foundational software engineering and DevOps practices at a new startup, establishing internal processes, self-hosted tooling, maintaining cloud servers, fulfilling client project tasks, and mentoring software developers.

- Maintaining a fleet of machines hosting Wordpress, Umbraco, .NET, Magento and more, ensuring shared adherance to standards and handling millions of page requests daily.
- Self-hosting internal tech such as Git, Drone CI and password management.
- Overseeing financial spending, conducting regular analysis and research to optimise cloud purchases for performance and cost-effectiveness.
- Implementing systems for hotel bookings, event bookings and storefront purchasing with payment platform integrations.
- Leading clients meetings to assess needs, evaluate workloads and foster strong client communication ensuring lasting partnerships and meeting project goals.

SOFTWARE ENGINEER
Sept. 2015 – July 2018

Developed for a line of WAN acceleration hardware products built on top of the Linux kernel, working with a C backend and Lua web front-end.

- Implemented new product features, with back-end features such as Cisco WCCPv2, SAS device monitoring, and multiple management features through a web interface.
- Served as a direct mentor to junior and student engineers, providing guidance to support their professional development and success within the company.
- Time and project management using tools such as Gerrit and Bugzilla.
- Authored documentation in LaTeX, encompassing internal research, planning, and customer-facing guides and manuals.

DEMONSTRATOR
Sept. 2014 – June 2015

- Assisted teaching a class of 70 second year students in *Games Computing and Computer Programming* modules
- Collaborated with lecturers to develop teaching materials, ensuring alignment with course objectives and student learning outcomes.
- Conducted practical workshops covering OpenGL with C++ and multiple game frameworks.

PROJECTS

SECRET SANTA GAME JAMS
2021 – present

Founded a yearly December game creation event receiving over 1000 submissions. Responsibilities include event design, community management and content moderation.
https://itch.io/jam/secret-santa-2023/entries

MOD_WREN
Apache module integrating a dynamically typed scripting language, Wren, to provide a PHP-like form of embedding code blocks inside HTML for web applications.
https://github.com/kyavi/mod_wren

CROSS-PLATFORM VIDEOGAME TOOLS
Designed and developed game frameworks and tooling in modern C++ for creating video games, prototypes, and interactive art across Windows, Mac, Linux, Android and the web.
https://kyavi.itch.io