Daniel Vasquez

Software Engineer

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Vancouver, Canada

WORK EXPERIENCE

Software Engineer — *LFX Digital*

July 2019 to December 2022

Led the research and development of web 3D viewing and annotation solutions to align with digitalisation objectives within the product lifecycle of major apparel brands. Reduced file export times from minutes to seconds by implementing automation plugins in Python/C++. Implemented features in a React.js frontend and Java backend. Led the development of Electron.js application to efficiently upload large files and submit jobs for rendering 3D content. Supported backend engineering team in building a proprietary compute graph framework on AWS for scalable cloud-native rendering and processing of 3D assets. Extended Python processes in our compute framework and resolved bugs in complex graphs. Supported many customers in resolving technical issues. Started tenure at the startup FNX Technologies, which was later acquired by LFX Digital.

Software Developer (Pipeline TD) — *ScanlineVFX*

April 2016 to July 2018

Designed and developed plugins for third-party 3D applications to efficiently export and publish large asset files. Supported hundreds of artists and technical directors across the visual effects pipeline by debugging issues in asset management and workflows. Extended and maintained internal APIs and cross platform desktop tools for the setup, caching, viewing, and tracking of thousands of digital assets. Designed and wrote technical briefs.

Software Engineer — *Moving Picture Company*

May 2014 to August 2015

Designed and implemented a Python API to automate high-throughput processing of images for panoramic stitching, culminating in a co-authored publication at SIGGRAPH 2015. Collaborated asynchronously with developers in various studios across multiple time zones. Provided technical support to hundreds of internal users. Oversaw Linux environments, coordinating with department supervisors to deploy updates across all departments in accordance with scheduled releases.

EDUCATION

University of British Columbia

Bachelor of Computer Science, 2012 to 2016

Seneca Polytechnic

Graduate Certification - 3D Animation, 2006 to 2007

PERSONAL PROJECTS

• *Lyddy* social media web application (lyddy.stream)
• *Spotyt* containerized web app to stream and download music (spotyt.nielvas.co)
• Self-learning WebGPU API (C++)

SKILLS

Full Stack development • 2D/3D pipeline tooling and workflow automation • Agile practices • UI design • CD/CI • Writing technical and end-user documentation • Mentorship and code reviewing

TECHNOLOGIES

Languages: Python • JavaScript • C++ • Bash / Shell scripting • HTML / CSS • SQL

Technologies: React.js • Next.js • Redux • Electron.js • Express.js • Node.js • PyQT • FastAPI • Flask • Blender • Autodesk Maya • glTF • Git • AWS S3 • Google Cloud Run • Firebase • Docker • CircleCI • GitHub Actions

PUBLICATION

Roundshot Pipeline at MPC for "Godzilla" (SIGGRAPH 2015)