Daniel Vasquez

Software Engineer

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Vancouver, Canada

WORK EXPERIENCE

Software Engineer — *LFX Digital*

July 2019 to December 2022

Implemented user interfaces and automated workflows for various third-party DCC software using Python, JavaScript, and C++. Supported core engineering team in building a compute graph framework for scalable cloud-native rendering and distribution of large 3D assets. Extended Python processes in our compute framework and resolved bugs in complex graphs. Supported many customers in resolving technical issues. Led the research and development of web based 3D viewers and annotations for a digital asset management system. Initially began as the startup FNX Technologies, 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 PyQt desktop tools for asset setup, caching, viewing, and tracking.

Software Engineer — *Moving Picture Company*

May 2014 to August 2015

Developed pipeline tools and APIs in Python for the visual effects of major feature films. Collaborated asynchronously with developers and stakeholders in various studios across multiple continents. Worked with artists to troubleshoot system issues, understand production needs and researching new techniques to meet those needs. Core developer on Python API for automating high throughput processing of images for panoramic stitching for use in artist workflows, resulting in SIGGRAPH 2015 publication as co-author.

EDUCATION

University of British Columbia

Bachelor of Computer Science, 2012 to 2016

Seneca Polytechnic

Graduate Certification - 3D Animation, 2006 to 2007

McMaster University

Bachelor of Science - Biochemistry, 2001 to 2006

PROJECTS

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

SKILLS

Visual effects pipeline and 3D workflow automation • Full Stack engineering • Agile practices • UI design • CD/CI • Writing technical and end-user documentation • Mentorship and code review

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)