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 based 3D viewing and annotating solutions to support our digital asset management (DAM) product. Implemented new features in the frontend (React) and backend (Java) of our DAM. Reduced file export times from 5 minutes to just 5 seconds by implementing automation plugins and developing an Electron.js/Node.js application that enables users to efficiently upload files for 3D rendering. Supported backend engineering team in building a proprietary 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. Initially began my tenure at the startup FNX Technologies, which was subsequently acquired by LFX Digital (Li & Fung).

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 desktop tools for the setup, caching, viewing, and tracking of assets.

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 world-wide. Worked with hundreds of artists to troubleshoot system issues, understand production needs and research 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

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 API (C++)

SKILLS

Full Stack development • Pipeline 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)