Daniel Vasquez

Software Engineer

Email: d@nielvas.co
Web: www.nielvas.co
Vancouver, Canada

HIGHLIGHTS

Successfully launched a SaaS product as a core contributor at a startup, streamlining 3D content creation workflows and accelerating digital transformation for leading apparel brands such as Supreme and Tommy Hilfiger. Led the integration of a web frontend for annotating and collaborating on enterprise-scale 3D datasets following the acquisition of the startup by LFX Digital. Designed and implemented a Python API at MPC, resulting in co-authoring a SIGGRAPH publication. Actively seeking opportunities to grow with a company that pushes the boundaries in visual storytelling and immersive experiences.

WORK EXPERIENCE

Software Engineer — *LFX Digital*

July 2019 to December 2022

Proactively led the development of web 3D viewing and annotating solutions in the digitalisation of the product life cycle at leading fashion & apparel brands. Reduced file export times from minutes to seconds by implementing automation plugins in Python/C++. Key contributor on desktop 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. Started tenure at a startup which was 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 over 30 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 — *MPC*

May 2014 to August 2015

Designed and implemented a Python API to automate high-throughput processing of images for panoramic stitching, resulting in a co-authored publication at SIGGRAPH 2015. Collaborated asynchronously with developers in various studios across multiple time zones. Provided technical support to over 20 internal users. Oversaw updates on ~80 configurations of Linux environments, coordinated with department supervisors to ensure timely and scheduled releases.

EDUCATION

University of British Columbia

Bachelor of Computer Science,
2012 to 2016

Seneca Polytechnic

Graduate Certificate - 3D Animation,
2006 to 2007

PERSONAL PROJECTS

• *Spotyt, 2023:* Containerized web application to play and download Spotify playlists, achieved 10x speed improvement in batch downloads by implementing asynchronous I/O streaming from backend
• *Self-learning, 2023*: WebGPU API in C++
• *Lyddy, 2019:* Social media network using an undirected graph structure in Firebase Realtime Database, with a React frontend

SKILLS

2D/3D content creation tooling and workflow automation • Full stack web development • Agile practices • UI design • Writing technical and end-user documentation • Mentoring and code reviewing • RESTful APIs

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