**Summary**

Seasoned professional in visual and spatial design with a wide portfolio of work in the fields of civil and telecom engineering. Expertise includes 3D renderings, terrestrial laser scannings, CAD and CAD standards including cross-platform translation of data such as Autodesk products, MicroStation, GIS, and other platforms. For samples of my work please visit [jeremy3d.com](https://jeremy3d.com).

Major projects include:

* Seattle Viaduct Replacement Tunnel
* Sound Transit Light Rail
* Camano Island Bridge replacement
* Four hydroelectric dams
* Downtown Seattle telecommunications plant

**Skills**

|  |  |
| --- | --- |
| * CAD / CAM / BIM * CAD standards * 3d modeling and 3d simulation * Architectural rendering * Photo simulations (legal photo collection, simulation build, camera matching, photo real rendering, Photoshop manipulation) * Video matching, animation, video production | * CFD modeling, geological modeling, surface and subsurface analysis * Deviation mapping, laser/sonar scanning and point cloud modeling * Trenching, boring, aerial infrastructure/pole loading * Fiber and Telecom design * Renderfarm build and Management * Computer hardware and software troubleshooting * VR - AR trendends |

**Experience**

**Manager of CAD systems**

Furtado & Associates Inc. (formerly Lin & Assoc. Inc.), 2019-present, Seattle, WA

* Lead terrestrial laser scanning, scan registration, point cloud modeling and visualizations using Cyclone, 3dReshaper, Recap.
* Design large complex digital terrain maps (DTM), deviation modeling and construction quality control for Seattle's regional Light Rail system.
* Design Survey asbuilts, ALTAs, and ROW design for city, state and private clients.
* Assure quality control on Light Rail construction projects.

**Fiber Engineer**

Crown Castle (Contract via Stone Recourse Group) 2018-2019, Seattle WA

* Designed large fiber networks within the Pacific Northwest region in AutoCAD, GIS and OSPi software.
* Supervised schematic splicing designs, civil designs, route designs and asbuilting.
* Developed systems for record keeping to improve processing and communications with construction management, project managers and wireless providers.
* Supported permitting and jurisdictional relations.
* Collaborated with design teams in California, Texas, Florida, New York.

**CAD Systems Administrator**

Barghausen Consulting Engineers, 2017-2018, Kent WA

* Managed all design software systems for all disciplines (Survey, 3D scanning, Architectural, Civil, Electrical, and Mechanical) for four offices on the West Coast.
* Created Civil 3D CAD standards for a customized interface (CUI) running scripts, blocks and shortcuts to optimize performance across the company.
* Managed and budgeted licensing, upgrade deployments, and customizations for Autodesk, Bentley, Autoturn, Sketchup, systems.
* Hardware and software, Servers, Networking, desktops, printers / plotter support.

**Special Information Scientist VI**

Tetra Tech, 2013-2018, Bothell WA

* 3D modeling and Animation with complex and extremely high polygon count models
* Terrestrial and mobile laser Scanning, scan registration and point cloud modeling, using a wide range of softwares such as, Cyclone, 3dReshaper, Polyworks, Cloudworx, GeoMagic, etc.
* Video production and IT services around the office, purchasing, building and managing render-farms as well as advising management of technology advances and trends resulting in optimizing office efficiency.
* Civil 3D Drafting and Design, including Topographic survey creation, DTM / Surface creation, COGO point input and export, project setup and sheet creation.
* Operation, maintenance, and troubleshooting of a wide range of survey collection equipment including Leica, TOPCON, Riegl terrestrial robotics and hydrographic collection devices.
* Marine Charting of off-shore surveys using a wide range of data from sonar, sidescan, magnetometer, subbottom data.

**Engineer III / CAD Manager**

CenturyLink / Qwest Communications, 2009-2013, Seattle WA

* Managed all projects within the downtown core of the Seattle "Main" wire-center including: plant design, permitting and Right-of-Way acquisition, construction, budgeting, and crew scheduling.
* Communicated technical information and sold services to many municipalities, project managers, engineers, construction crews and property owners.
* Trained employees and contractors in civil design standards, CADss drafting, and site surveying with a TOPCON GRS1 GPS data collector.
* Performed OSP telecommunications engineering work.
* Created CAD standards for permit applications with the City of Seattle and designed sites to meet these standards.

**3D Animation and Modeling / Survey Technician / Desktop Support**

David Evans and Associates, Inc., 2004–2008, Bellevue WA

* Established the 3d animation and simulation department from the ground up.
* Processed data utilizing a wide range of systems (laser scanners, lidar, topographic maps, blueprints, and poly modeling), then import into animation software, applying lighting and texturing, bringing it to life.
* Developed models to demonstrate to public and private venues a variety of applications prior to ground being broken.
* Administer and managed all information systems, ranging from printers to network servers.
* Topographic map creation for high-profile clients and projects within the greater Seattle region.

**User Service Specialist**

Seattle University, 2003–2004, Seattle WA

* Provided high-level of technical support services to a campus consisting of 20,000+ students, staff, and faculty.
* Provided Tier 2 support to thousands of students and staff.
* Facilitated a migration of email system from Exchange 5.5 to 2003, resulting in increases of overall employee productivity and improved communication.

**3D Forum Administration work (volunteer)**

Provided administration, service, technical support and advice for one of the world's largest 3d animation forums consisting of artists residing all around the world.

**Training**

* Self-learning in wide range of current industry technologies 2000-Present
* OSPi Training, Crown Castle, Houston TX 2019
* CRM Training, Crown Castle, Irvine, CA 2018
* Autodesk Administration Training, The PPI group, Kent WA 2017
* OSP-FM / Fireworks / Bidmaster Training CenturyLink, Kent WA 2010-2012
* AutoDesk AutoCAD 2008 Civil 3D Training, David Evans and Associates 2008
* Windows OS Training (equivalent of MCP Certifications) 2001
* Web based Macintosh Hardware and Software Training, Apple Product Professional 2000