

# NHAN NGUYEN

(425)-628-9776    [✉ thuynhan1995@gmail.com](mailto:thuynhan1995@gmail.com)    [in linkedin.com/in/nhannguyen95](https://www.linkedin.com/in/nhannguyen95)    [nhan-nguyen.com](https://nhan-nguyen.com)

## EDUCATION

- **University of Washington** Seattle, WA  
*Master of Science in Mechanical Engineering; GPA: 3.7* *Sept. 2022 - March 2024*
- **Seattle University** Seattle, WA  
*Bachelor of Science in Mechanical Engineering* *Jan. 2016 - June 2018*

## EXPERIENCE

- **Baker Hughes** Ho Chi Minh City, Vietnam  
*Mechanical Design Engineer Intern — Subsea Oil & Gas Equipment* *June 2023 - Sept. 2023*
  - **Product Design:** Created conceptual and detailed design for an anode skid, end plates, and other part's modifications using **PTC Creo**.
  - **Drafting:** Produced detailed part and assembly drawings, managed part data, workflows, and Bill of Materials (BOMs) in **Siemens Teamcenter** PLM software.
  - **Structural Analysis:** Verified the wellhead retrieval tool design through stress and strain hand calculations, emphasizing hydraulic systems, pressure vessels and threaded joints.
  - **Technical Documentation:** Compiled a 60+ pages Design Verification Package (DVP) for the tool assembly, reviewing part documents, **FEA** reports, using **PTC Mathcad**.
- **Arevo** Ho Chi Minh City, Vietnam  
*Manufacturing Engineer - Carbon fiber thermoplastic filament production* *July 2021 - April 2022*
  - **Optimization:** Executed test plans on a new manufacturing line, optimizing die speed, temperatures, bath concentration, etc., during R&D phase.
  - **Metrology:** Utilized thermal couples, FLIR cameras, leveling tools, calipers, dial indicators, test fixtures for inspecting roller dies and ovens.
  - **Production Analysis:** Calculated material input/ output, yield, material costs, and labor using **Excel**.
- **Buhler Group** Ho Chi Minh City, Vietnam  
*Mechanical Design Engineer — Food Processing Solution* *March 2020 - July 2021*
  - **Plant Layout Design:** Concept to detailed design including building, machinery, and piping layouts and sheet metal parts (bends, flanges, hoppers) and using **AutoCAD 2D/3D** and **Autodesk Inventor**.
  - **Engineering Calculation:** Performed ductwork system's volume and pressure drop calculations for P&IDs, overseeing the equipment selection, including valves, fans or pumps.
  - **Drafting:** Created engineering drawings (layouts, building indications, parts, and installation), including Bills of Materials (BOMs). Managed project data in **ProjectWise**.
  - **Project Execution:** Led 100+ hour work packages, including the concept design of the ship unloading conveyor belt lines (Portalink) for a successful sales bid project.
- **Philips** Bothell, WA  
*Test Technician — Ultrasound Medical Device* *Oct. 2018 - Oct. 2019*
  - **Technical Troubleshooting:** Conducted functional tests and troubleshooting on IU22/IE33 Ultrasound Systems.
  - **Documentation:** Documented system issues in Device History Records (DHR) within the ERP (SAP) system.

## PROJECTS

- **3D Sigmalab (3dsigmalab.com):** We built a DIY single-screw **plastic extrusion** line from the ground up, which aims to offer an affordable source of filaments to the growing 3D printing community in Vietnam.
- **FEA Project:** Simulated and compared **Abaqus**, **Ansys** and **Matlab** results for 2D/3D structural problems, including trusses, beams, box beams, and plane stress/strain analyses .
- **MEMs Steward Platform:** MUMPs-based design incorporates Chevron actuators for mirror steering.

## SKILLS

- **Computer-Aided Design & Simulation Tools:** Pro/Engineer (PTC Creo), AutoCAD (Mechanical, Advanced Steel, and Architecture), AutoPlant, SolidWorks, ABAQUS, ANSYS.
- **Programming:** Python (Numpy, Matplotlib, CUDA), C++, MATLAB, SQL (Microsoft Azure), Arduino IDE, Mathematica, G Code, Excel VBA, HTML.
- **Industry Knowledge:** GD&T, Material Properties, Design for Manufacturability (DFM), Design Process Plan (DPP), Product Lifecycle, Six Sigma, ECR, DPP, FMEA.
- **Relevant Courses:** Vibrations, Modern Manufacturing Processes, FEA, Computational Techniques in ME, Parallel Computing, MEMs Fabrication Processes, Additive Manufacturing, Database Systems.