VALERY NGUYEN

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EXPERIENCE

Software Engineer | Control Systems – Orano USA   Oct 2011 – Dec 2014 / May 2017 – Jan 2019

- Developed PLC code utilizing Siemens STEP 7, Ladder Logic, Grafcets, Function Blocks, and Structured Text Language.
- Designed and implemented software solutions for nuclear fuel manufacturing material handling, part tracking, and data storage and retrieval.
- Led PLC software tests on Siemens PLC (SIMATIC S7-400) test platform using Siemens STEP 7 and WinCC Open Architecture, and delivered four complete software programs for commissioning.
- Analyzed and interpreted mechanical drawings and company standard programming requirements to construct and maintain comprehensive software design documents and test specifications.

Mechanical Engineer – Orano USA   Jan 2015 – Apr 2017

- Performed structural analysis on support structures for automation systems' hardware using ANSYS Mechanical APDL and ANSYS Workbench to verify and establish structural qualification.
- Executed over 60+ evaluations of support frames, anchors, and welds to ensure structural integrity using ANSI/AISC N690-94 standard and AWS D1.6:1999 code.
- Transmitted accelerations, reactions, and deflections to interfacing construction and mechanical organizations to support 18+ field changes and design improvements.

EDUCATION

University of California, Los Angeles (UCLA)   June 2011

B.S. in Mechanical Engineering

TECHNICAL SKILLS / SPECIALTIES

- **Languages:**   JavaScript, Ruby, SQL, HTML5, CSS3, GraphQL
- **Frameworks:**   React.js, Redux.js, Express.js, Node.js, Rails
- **Database**:   MongoDB, PostgreSQL
- **Platforms**:   Git, Docker, Heroku

RECENT PROJECTS

somethingSpecial (Ruby-on-Rails, ReactJS, ReduxJS)   [live](#) | [repository](#)

- Built an e-commerce application implementing product categories, searches, reviews, and wish list functionalities by leveraging RESTful APIs and standardized CRUD patterns.
- Reached a responsive design by combining CSS media queries, Flexbox layout, and the usage of multiple margin, padding, and font sizes.

LightChat (GraphQL, Docker, MongoDB, ExpressJS, ReactJS, NodeJS)   [live](#) | [repository](#)

- Engineered the real-time messaging functionality entirely with GraphQL/Apollo mutations and subscriptions.
- Simplified the server configuration by combining two separate HTTP and WebSocket servers into a single server and setting up a listener on one port for all requests, thus allowing deployment of the Docker-based app to Heroku.

CoolBnb (MongoDB, ExpressJS, ReactJS, ReduxJS, NodeJS)   [live](#) | [repository](#)

- Implemented the back-end logic allowing users to filter available lodging options based on map location, dates, occupancy, and price, by utilizing Mongoose models and executing queries.
- Redesigned the marker manager to store and display markers located within map boundaries provided by Google Maps JavaScript API, as well as seamlessly update the markers as the map is moved.