

# THUAN DONG TAN

*Senior/Lead Front-end Engineer*



I have been working as a Front-end developer for more than 8 years, commencing in 2014. Working on a variety of website and application development projects, as part of a team or independently. I also served as a leader for a brief period.

I have solid experience in many works in e-commerce (using ReactJS, Redux, Rest API, TypeScript), real-time service (using WebSocket, Rest API), offline service (using service worker, Rest API), 2d game (using SVG and Canvas), desktop apps for Windows and macOS (using ReactJS, Electron) and more...

My responsibilities, roles, and experiences are very diverse. I can build a project from scratch; design front-end structure; propose new ideas (technologies, pipelines, etc.); develop algorithms; use design patterns appropriately; follow programming principles; have a mindset of testing and problem-solving; troubleshoot issues; train, support, or interview candidates...

When I'm not working, I enjoy spending time with my friends and family, but I also enjoy participating in sports such as boxing or going to the gym, traveling, playing video games, or simply surfing the internet to learn new things.

## Education

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### Graduation

2010-2013	Associates Degrees in Computer Science Hung Vuong University
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### Languages

English	Good communication
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## Core Qualification

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- Proposing various ideas in order to enhance UI and UX experience.
- Building responsive websites and compatible with multiple browsers using HTML5/Nunjucks, CSS3/Sass, JavaScript, jQuery, Webpack, Gulp, Git, and REST APIs.
- Using CSS preprocessors such as SASS and LESS in order to manage, reuse and extend CSS easier via variables, lists, functions...
- Building a single-page web app (SPA) using React.js; data management with Redux; communication with the back-end via WebSocket or REST; and bundle using Webpack.
- Creating HTML email templates and newsletters for email marketing.
- Developing internal utility scripts (using NodeJS or bash script) to automate some procedures.
- Project management within Agile framework, using Trello or JIRA.
- Working at high-quality coding standards to reduce the technical debts.
- Willing to learn new technologies which help to extend "the view of the picture".
- Friendly and good collaboration with other team members.
- Closely working with the project cycle, stakeholders, and teammates to understand clearly and unite the requirements.
- Training and supporting team members to help them have good motivation and contribute better to the company.
- Good communication to build trust and work better, also to balance life and work.



## Hand-on Technical Skills

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**Core Languages:** JavaScript, Dart

### **Framework & Technologies:**

- **Web Technologies:** HTML (DOM, virtual DOM, shadow DOM), CSS (motion, animation, layout...), JavaScript (Server-side rendering, Client-side rendering, service worker), TypeScript.
- **Module Loader/Bundler:** Webpack
- **Micro Frontend:** Webpack 5's Module Federation
- **IDE/Editors:** Sublime Text, Visual Studio Code

- **Task Runners:** Gulp, Grunt
- **HTML Preprocessors:** Nunjucks, Mustache
- **CSS Preprocessors:** Sass, LESS
- **Graphics Tools:** Adobe Photoshop, Illustrator, Sketch
- **Frameworks/Libraries:** Bootstrap, Foundation, Ant Design, jQuery, Lodash, Ramda, React, React Native, Redux, Three.js, d3.js, fuse.js, Electron, Agora...
- **Version Controls:** Git
- **Repository management:** GitLab, GitHub, Bitbucket
- **Package management:** Lerna, Yarn 2
- **Processes/Methodologies:** Agile, Scrum, Waterfall, Kanban
- **Operating Systems:** Windows, macOS, Linux
- **Unit testing:** Jest, Enzyme, React Testing Library
- **Automation testing:** Cypress, Percy
- **Logging/Tracking/Monitoring:** Datadog, Sentry.io
- **CI/CD:** Builtkite, GitLab CI/CD, Circle CI
- **Others:** Docker, Linux bash script, SQL, Node.js, styled-components, CSS Module, Flutter, NPM, Yarn, PostCSS, ESLint. Babel, Puppeteer, Jira's tools, etc.

## Working Experience

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### Senior Front-end Engineer – *Autonomous., Ho Chi Minh City - August 2021 to Jun 2022*

- Maintaining obsolete features.
- Developing on-demand and dropping-off useless features based on the business metrics.
- Upgrading outdated packages and resolving problems from it.
- Logging and tracking via internal library, powered by Autonomous team.
- Working with Three.js to create scene; render 3D objects into scene; attach animation to an 3D object, and so on.
- Working with Dart and Flutter to create mobile application.
- Team management with Jira's tools.
- Workspaces management with Yarn 2.

- Creating utility scripts for internal use.
- Webpack configuration for different targets.
- Implement CI/CD pipeline using GitLab CI/CD.
- Restructure and clean code duplication.
- Joining the interview with many candidates to find suitable ones for the project.
- TypeScript is always required.

### **Key Achievements:**

- Gain more knowledge about Dart, Flutter and Node.js
- Resolve many migration issues.
- Working and building application; and resolving issues when working with Electron.
- Team management mindset.

### **Software Engineer (React.js) – *MessageMedia, Ho Chi Minh City - Sep 2019 to August 2021***

- Working on product that's serving many users from B2C to B2B.
- Working on Agile environment with tools such as JIRA, Bitbucket and Confluence.
- Involve closely with the Melbourne team for the lifecycle of each feature.
- Features migration and maintaining; refactor and maintain the obsolete components.
- Tracking end-user errors with Datadog technologies.
- Tracking component changes with Percy.
- E2E testing with Cypress.
- Unit testing with Jest/Enzyme.
- Packages management with Lerna.
- Handling React forms using React Final Form.
- Splitting up the enormous product, from monolithic to micro-frontend.
- Modify webpack configuration to adjust performance when working as run-time or built-time environment; and handle technical issues when updating packages.
- AWS configuration for many purposes like storage, cron job, trigger event...
- Implement CI/CD pipeline using Buildkite.

- Working with QA 1-on-1 to make sure the developing feature is met acceptance criteria (AC) before delivery.
- Resolve UI bugs on different browsers.
- Cross-team supporting.

### **Key Achievements:**

- Micro front-end contribution.
- Gain knowledge about AWS such as Lambda, S3, CloudFormation, CloudWatch...
- Get familiar with Typescript, Cypress.
- Gain more knowledge when working with React hooks.
- Deep dive into Webpack configuration.
- Get more knowledge about testing mindset.

## **Senior Front-end Developer (React.js) – *PYCO Group, Ho Chi Minh City - Jan 2019 to Sep 2019***

- Develop complex mobile and web interfaces relating to the project scope.
- Work closely with back-end team members to implement back-end login on the front-end.
- GraphQL and REST integration.
- Using CSS frameworks such as Bootstrap, Material Design, Ant Design... to build responsive websites.
- Implement unit tests with Jest/Enzyme, across multiple projects. Ensure the code coverage always greater than 80%.
- Code reviewing and managing.
- Implement progressive web apps (PWA) to let project working at offline mode.
- Working with indexDB and WebSQL via localForage - a JavaScript library.
- Working on different mindsets, between OOP and functional programming.
- Problem-solving and troubleshooting issues effectively.
- Implement CI/CD pipeline via CircleCI.
- Support QA when doing smoke test, regression test or Integration test.

### **Key Achievements:**

- Distinguish between Javascript's microtask and macrotask when working with Promise and setTimeout.
- Understand Garbage Collector of Javascript.
- Gain more knowledge about functional programming and its core concepts.
- Understand the benefits of writing unit tests.
- Familiar with Jest/Enzyme, more understand to mock a function, take a component snapshot...
- Understand more deeply about algorithm and data structure mindset.
- Gain knowledge about service worker, such as store data when offline and push when online.
- Understand the functional and non-function testing mindset.

## **Front-end Developer (React.js) - *IT Consultis, Ho Chi Minh City - Dec 2017 to Jan 2019***

- Build a single page web app (SPA) using React.js, and store management using Redux.
- Communicate with back-end to give idea of creating RESTful APIs.
- Working with form technologies such as Redux-form and Formik to handle form submitting.
- Implement a high-quality standard website from mobile to desktop, follows SEO/web standards.
- Composing CSS styles using Styled-components or CSS preprocessors like Sass and LESS.
- Working with PostCSS and its plugins to find error, add CSS vendor prefixes, and handle encapsulation.
- Ability to create some complex animations using three.js and d3.js.
- Ability to create charts by using Chart.js and d3.js
- Troubleshooting issues that affect the clients' website.
- Proactive to handle and resolve issues not only within technical but also other things at work.
- Working with NPM commands and using package.json for managing dependencies and dev-dependencies.
- Project management within Agile framework and controlled by Redmine workflow.

- Working with Front-end team to create Front-end boilerplate.
- DevOps' using Docker to create instant server for both development and production environment. Then, the team includes Back-end and Front-end will work on that server.
- Collaborate with other team members (PM, DevOps, QA/QC, Back-end, Front-end lead) to ensure the team operates more efficiently.
- Maintain websites which using CMS like Wordpress, Drupal or Magento.

### **Key Achievements:**

- Gain more knowledge about React.js (React lifecycle, HOC, render props, ...) and Redux.
- Familiar with Redmine, a project management.
- Lots of good feedback from the leader, and the higher levels.
- Improve ES6 skills.
- Gain knowledge of Docker and Docker compose.
- Get familiar with software design principles such as DRY, YAGNI, KISS, SOLID...
- Gain more knowledge of software design patterns.
- Understand MVC architecture and open mind for another architectures.
- English communication better for 4 skills.
- Way to estimate and hit story point.

### **Front-end Developer - *KMS Technology, Ho Chi Minh City - Sep 2017 to Nov 2017***

- Starting in a new working environment and first time working with a large team.
- Understanding the process of work, people and culture of the team.
- Maintain and resolve client-side bugs (React.js, Javascript/ES6), unit testing (Jest/Enzyme).
- Generate a weekly report to Project Manager.
- Working as an Agile team and using JIRA tools for management.
- Research MobX and Redux for state management.
- Discussion and working with QA to handle testing cases for each task.
- Working with the QA team to resolve bugs and performance issue.
- Using SVN and Git to manage repositories.

**Key Achievements:**

- Gain more knowledge about React.js, Redux.
- Understand the workflow before creating a pull request.
- Get more experience of JIRA tools.

**Front-end Developer - *Pure Solutions International, Ho Chi Minh City - Dec 2014 to Aug 2017***

- This is the beginning of my journey after leaving the college.
- Develop new user-facing features and take main responsibility for client-side.
- Propose various ideas in order to enhance UI and UX experience.
- Ensure the technical feasibility of UI/UX designs.
- Implement website animation for the best experience and first impression.
- Project management within Agile framework, using Trello or JIRA tools.
- Participate in projects in all stages of the product lifecycle.
- Collaborate with other team members and stakeholders.
- Collaborate closely with the project and design team to translate requirements into technical designs.
- Training intern members of Front-end team.
- Develop many scripts, using task runners such as Gulp and Grunt, or maybe bash shell command, to handle tasks that tend to iterate.
- Using CSS preprocessors like Sass and LESS to manage and develop CSS easier, also save time and save package size when compiling.
- Ability to apply new technologies for each new project.
- Ability to making HTML5 games, working with HTML5 Canvas or DOM.
- Handle CSS issues on IE browsers, especially IE8.
- Create mobile applications for iOS and Android with React Native.

**Key Achievements:**

- Gain more knowledge about Javascript, jQuery, HTML5, CSS3, Sass, LESS, Webpack...
- Be a team leader.



- Training interns.
- Help the other team members resolving client-side interface and technical issues.
- Always received good feedback from clients about the Front-end side.
- Building a Front-end boilerplate, instant scripts for reuse in another projects.
- Get knowledge about CSS3 such as flexbox, animation, transition, rounded corners...
- Using Git more comfortable and fluently; can manipulate many complex commands to merge, rebase, and revert code.
- Understand Webpack configuration (version 1 and 2)
- Distinguish HTTP Cookies, sessionStorage and localStorage and the different among them.

## Projects Case Studies

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### BANPU Underground Mining Assistant (UMA)

*Responsibilities* My main responsibility for this project is including the work like maintain the project, update new features, and the UI/UX, implement redux which using for managing the whole state of the app, restructure the components and containers.

- The 'Drag & Drop' feature is developed using react-beautiful-dnd which powered by Atlassian team.
- Implement unit test (Jest) which need to be covered over 80%
- Enhance the UI.

#### **Key Achievements:**

- Understand more about Agile and Scrum for product development.
- Get knowledge about unit testing (Jest), and Arrange, Act and Assert (AAA) pattern.
- A little bit knowledge about PWA - Progressive Web App, and service workers for offline mode.

*Project information* UMA is a Progressive Web Application (PWA) for mobile devices developed on ReactJS for Frontend application. Backend is

	Restful API developed based on Microservices architecture pattern. UMA is for the miner deputies to locate the machine equipment and order materials for the shift work underground mine sites.
<i>Size &amp; duration:</i>	7+ members from Jan 2018.
<i>Technologies:</i>	NodeJS, Hapi Framework, OAuth2, Restful API, MongoDB, MS SQL Server, Redis, Microsoft Azure, Github, CircleCI, Docker

## Banpu - SCPI

<i>Responsibilities</i>	<p>My main responsibility for this project is the project structure, manage and review code the components and containers, writing unit tests which suit the test cases, support and collaborate with the other team members to make sure no side-effect, no impact when deploying new code to client environment.</p> <p><b>Key Achievements:</b></p> <ul style="list-style-type: none"> <li>- Have more experiences with initial technical works from the beginning.</li> <li>- Understand the values of each individual, the importance of communication, helping and supporting each other. That will push the team to move forward, get strong and go further.</li> </ul>
<i>Project information</i>	Centennial and Banpu are implementing a Contract Lifecycle Management (CLM) solution in conjunction with a Supplier Compliance & Performance Insights (SCPI; pronounced 'Skippy') Application to deliver process, production and utilization value to Banpu and Centennial Procurement and Operational teams. This application is mobile web application to serve user for convenience of access with offline/online and integrate/interface with Contract management system and ERP system.
<i>Size &amp; duration:</i>	1 Agile team of 8 members during 3 months, from Apr 2019 to Jun 2019
<i>Technologies:</i>	ReactJS, NodeJS, GraphQL, Docker, Fuse.js, Redux, Webpack, Sass, PostCSS.

## Critical Mass - Nissan USA & Infiniti USA

<i>Responsibilities</i>	<p>My main responsibility for this project is maintaining the working website which exists more than 10 years. Almost tasks about resolving UI and technical issues. Support and collaborate with Back-end guys to complete the issue correctly.</p> <ul style="list-style-type: none"><li>- Resolve issues of the empty area when the function returns the data before responding from the server.</li><li>- Fix website "responsive" issue with jQuery plugins.</li><li>- Fix technical issues related to jQuery and Backbone.</li><li>- Resolve technical issues of Backbone.</li><li>- Working with AEM - Adobe Experience Manager.</li></ul> <p><b>Key Achievements:</b></p> <ul style="list-style-type: none"><li>- Get knowledge of Backbone and AEM.</li><li>- Proactive support other members about Front-end technical.</li></ul>
<i>Project information</i>	<p>Nissan USA and Infiniti USA are car buying websites allowing users to explore vehicle features, pricing, offers, and more. Critical Mass (CM) is an agency between PYCO Group and them. The project just wants to keep running the current business without so many changes, just fix issues, adjust performance and make it work normally.</p>
<i>Websites</i>	<p>www.nissanusa.com www.infinitiusa.com</p>
<i>Size &amp; duration:</i>	<p>8+ members from Jun 2019 to Sep 2019.</p>
<i>Technologies:</i>	<p>Java, AEM, Server-side rendering, Jenkins, Docker, jQuery, Backbone.js, Sass...</p>

## MessageMedia

<i>Responsibilities</i>	<p>I take responsibility for the Front-end scope such as handle data rendering, component skeleton, unit testing, problem-solving...</p>
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- Form migration, from Redux form to React final form.
- Uplifting component and design.
- Handle asynchronous code.
- Create helper function for reusable.
- Working on many important business features such as:
  - Message-box - message composing.
  - Mobile landing-page - message composing with mobile website.
  - Automation - filtering message and triggering next to do tasks when receiving or sending message.
  - Template - composing a message-box template that can be reusable.
  - Draft - temporary save when composing a message.
  - Reports - providing diverse reports for many purposes.
  - Sub-account – create, edit and manage sub-accounts. Also, take care the permission, type and behavior of single sub-account.

### **Key Achievements:**

- Take owner many epic features.
- Contribution many works in new features, code refactoring and review.

#### *Project information*

MessageMedia is an Australia's largest business mobile messaging service provider and a leading player globally, headquartered in Melbourne.

At Vietnam office, we work as a development center and fully responsible for all parts of the messaging platform.

In 2021, Sweden's Sinch acquired MessageMedia for \$1.3B.

#### *Website*

hub.messagemedia.com

#### *Size & duration:*

40+ members from 2017 to present.

#### *Technologies:*

Node.js, PHP, Java, AWS, Mircro-service, Micro-frontend, React.js, Redux, Webpack, Buildkite, LESS, PostCSS...

## Autonomous - Hybrid

<i>Responsibilities</i>	<p>Maintained old features and developed on-demand features.</p> <ul style="list-style-type: none"><li>- Working on some features:<ul style="list-style-type: none"><li>▪ Booking desk or room.</li><li>▪ Schedule to booking desk or room.</li><li>▪ Booking time.</li><li>▪ Booking is reserved or available</li><li>▪ List people</li><li>▪ History of booking.</li></ul></li></ul> <p><b>Key Achievements:</b></p> <ul style="list-style-type: none"><li>- Take owner almost Front-end features.</li><li>- Get familiar with a new business model.</li><li>- Delivery feature on time with good estimation.</li></ul>
<i>Project information</i>	Hybrid is a toolkit that allows you to easily book desks and rooms in your hybrid office.
<i>Website</i>	hybrid.autonomous.ai
<i>Size &amp; duration:</i>	10+ members from 2017 to present.
<i>Technologies:</i>	Node.js, React.js, Redux, Formik, Webpack, WebSocket, REST, TypeScript.

## Autonomous – Jam/Mosh

<i>Responsibilities</i>	<p>Switching to Jam/Mosh to fill the empty position and become the Front-end lead of the project. I took responsibility to manage and lead the team to continue the work of the previous leader.</p> <ul style="list-style-type: none"><li>- Create audio call among users using Agora and WebSocket.</li><li>- Develop feature to schedule a meeting.</li><li>- Implement features playback control, screen sharing, screen capture, etc.</li></ul>
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- Allow creating a room-calling privately or publicly.
- Apply Pub/Sub pattern to handle events such as before-calling, after-calling, and in-calling.
- Handling issues of losing call signal, slow network, or losing the connection of WebSocket, etc.
- Logging and Tracking are using internal library, powered by Autonomous team.
- Working with Yarn 2 to manage workspaces between web and desktop apps.
- Create a VR room using Three.js, to generate a 3D room that which users can interact together within room.

### **Key Achievements:**

- Take responsibility for the whole project and allocate tasks to team members.
- Gain knowledge and experience of code signing and application building on macOS and Windows.
- VR room is a premise to build Rove.to.
- Working as Front-end Lead.

#### *Project information*

The project was originally known as Jam, but they were unable to utilize the name since they failed to register a trademark for it. As a result, the project is now known as Mosh.

Mosh was created for online meetings just audio-only. Users can create or schedule a meeting, screen share, chat and listen to music together. Mosh focuses on the end-user who wants a lite meeting version and to use it internally or integrate it with any platform as a plugin.

#### *Website*

mosh.autonomous.ai

#### *Size & duration:*

7+ members.

#### *Technologies:*

React.js, Redux, React Final Form, Webpack, Electron, Electron Forge, Node.js, Yarn 2, WebSocket, REST, Agora, TypeScript.

## Autonomous – Rove

<i>Responsibilities</i>	<p>Had participated in the initialization of this project until they moved to use Unity and Flutter to continue to develop it.</p> <ul style="list-style-type: none"><li>- Create first landing page for marketing and introduction of Rove.</li><li>- Form registration.</li><li>- Three.js integration:<ul style="list-style-type: none"><li>▪ Rendering 3D models into a scene.</li><li>▪ Attach the animation to the 3D objects.</li><li>▪ Creating functionalities for 3D objects such as the human body can move, jump or dance.</li><li>▪ Using WebSocket to allow multiple players at a time can interact real-time.</li><li>▪ Calculation of collisions.</li></ul></li><li>- Working with Dart and Flutter to build mobile application and the marketplace.</li></ul> <p><b>Key Achievements:</b></p> <ul style="list-style-type: none"><li>- Initialize first “bricks”.</li><li>- Migration the JS code to Dart.</li><li>- Gain more knowledge with Three.js.</li><li>- Working as Front-end Lead.</li></ul>
<i>Project information</i>	<p>An ambition to connect the Metaverse closely with the end-user. Empower them to build 3D websites that are immersive, real-time, and persistent. The core part is about building the marketplace to let end-user can exchange in that virtual world via MetaMask.</p>
<i>Website</i>	<p>rove.to</p>
<i>Size &amp; duration:</i>	<p>5+ members from January 2022. At the end of June 2022, we have 50+ members.</p>
<i>Technologies:</i>	<p>Node.js, Docker, JavaScript, React.js, Redux, React Final Form, Three.js, Dart, Flutter, Unity, Agora, TypeScript.</p>