## About our interview

Meeting time: 01.05 01:30 ~ 02:00

Meeter: Andy

**About Andrew**

I am Andy and I work for FutureOn as a Senior Talent Partner, hiring across UK, France and Norway.

| Years of experience: | 14 years |
| --- | --- |
| Years at FutureOn: | 1 month |

We are looking for a Senior Full Stack developer that is passionate about building visual 2D/3D/VR solutions for Enterprise Data. You are preferably skilled or very familiar with our core technology stack/frameworks;

• Server-side frameworks/languages – Node.js

• Front-end MV\* frameworks (eg. Ember, Angular, React)

• Cloud infrastructure (eg. AWS, GCP, Azure)

• Containerization technologies (e.g. Docker, Docker Composer, Kubernetes)

• Visualization; WebGL, SVG

## About me

Name: Alexis Colin

Email: [ralchemist313@gmail.com](mailto:ralchemist313@gmail.com)

Birthday: 1991.09.07

Address: 20 rue Gontier-Patin, Aquitaine, France

Hourly: 50$/hr

Hours per week: More than 40 hrs/week

Nationality: French

Education:

Business and Development School 3A

Bachelor of Computer Science| September 2008 - May 2011

- Bachelor of Computer Science, Additional Major in Management

- GPA 17 / 20

- Award from Department of Science and Engineering

Моbile: +380 (95) 523-5368

## About Company

Name: FutureOn

Description

| Size: | 11 - 50 employees |
| --- | --- |

FutureOn was spun out of Xvision in 2014. Since then we have been developing software that helps oil and gas companies control costs, and manage resources better while getting to first oil faster.

FutureOn provides energy operators with the tools they need to get to first oil quicker. Our Software-as-a-Service (SaaS) platform enables rapid data, 3D visualization and real-time collaboration across the processes of design, development, operation and decommissioning of digital offshore subsea fields.

Delivered through a cloud based, open architecture operators can for the first time collaborate on field development and design with multiple third parties whilst ensuring data and design consistency under one solution. With our innovative tools, operators gain significant efficiency improvements in exploration, delivering savings across CAPEX and OPEX and reducing the environmental impact of their operations. Customers include global operators AkerBP, BP, Equinor, ENI, ExxonMobil, Lundin, Shell, Total and oil field service companies including Aker Solutions, McDermott, Schlumberger, Subsea7 and Wood.

At FutureOn we understand the climate and market pressures our customers are facing, so in response we are developing ground-breaking digital solutions that will help companies across the world achieve Net Zero faster. The World Economic Forum predicts that data and technology will unlock over €640bn in benefits and opportunities for the energy sector including a reduction of up to 1.3 billion tonnes of released CO2.

Our goal is to help companies tap into that value while supporting their Net Zero ambitions with our data-driven online platforms. We are planning to expand our award-winning tools to generate powerful visual simulations and analyzes that will help companies calculate and reduce their carbon emissions. Once developed, our innovative software will enable operators to evaluate efficiency, profitability and carbon footprint all within a single real-time

## Interview Direction

It’s great to meet with you to talk about the Senior Front-end Engineer role in your company.

1. About me

My name is Alexis Colin and I am here for a 2.00 p.m job interview for the React.js Developer position.

I was born on September the 7th in 1991 in HongKong.

When I was 9 years old, I moved to France with my family and have been living here until now.

In 2011, I got a Bachelor of Computer Science and graduated from Business and Development School 3A in France and since then my developer career has started.

1. Experience

I am a full stack developer with over 5+ years of experience specializing in developing front-end using React.js library.

As you saw my resume, my development career has started as a UI/UX designer.

It was a really important and useful experience of my career.

I was hired by Webincorp company in Qatar as UI/UX designer, and have worked for 5 months.

After that, I have worked in many international companies as many roles i.e. Web Designer, Front-end Web Developer, Full Stack web developer and senior react developer mainly in remote.

So eventually, I have become a senior React.js engineer who has 10+ years experience of web development and 5+ years of react development.

I love React.js because of its extra simplicity and flexibility.

Until now, I have developed with all React.js frameworks.

In UI framework, Material UI and ant design and shards react and Onsen UI and so on.

In static-site generation framework, Next.js and Gatsby.js.

In state management framework, redux more exactly redux-thunk, redux-saga, redux-promise and redux-slice.

And also I have ever used most of the React.js core technologies i.e. hook and context and react router and anyway you name it.

And also have experience of using GraphQL as a trending query language.

Most importantly, my latest role is senior blockchain developer.

Now, blockchain has been gaining so much popularity for a few years.

About 3 years ago, I was interested in trending blockchain technology and single-handedly trained and trained and applied at Singapore company to test me.

Eventually, I have passed the test and became a blockchain developer at that company.

There, I have developed many blockchain projects integrating React.js library i.e. NFT marketplace and Defi project and so on.

So I think my experience in blockchain is also useful for your company.

Once the opportunity arises, I will never miss it.

This is not my pride, I just told my experience.

Thanks for listening to my explanation.

Vue.js

* UI Framework

Bootstrap Vue

Quasar Framework

Vue Material

Vuetify

- **Static Framework Generators**

A static site generator uses templates and raw data to generate static HTML websites. These websites load the same way every time, and thus the web pages do not have to be coded individually.

The following frameworks generate static sites for Vue.js-

Vue Press

The [VuePress](https://vuepress.vuejs.org/) framework is a Vue-powered static site generator developed by Evan You. It is a perfect framework for building user interfaces for minimal web pages and single-page applications (SPAs).

Although considered as a subset of Nuxt.js, it allows markdown file compilation, default easy-to-navigate theme, and supports multiple languages.

VuePress is suitable for creating documentation and other content-driven sites.

Gridsome

[Gridsome](https://gridsome.org/) is an open-source performance- enhancive website deployment framework. It generates static sites with Vue.js.

Generate SEO-friendly [progressive web apps](https://www.monocubed.com/progressive-web-apps/) (PWAs) that are super fast with Gridsome. Working with the PRLP pattern, it supports GraphQL for queries, code-splitting, lazy loading, and automated compressions of images. It is the best Vue js framework.

-**Server-Side Rendering**

Server-Side Rendering Framework converts client-based Javascript web pages into static websites written in HTML or CSS.

The site loads on your server instead of a browser, and thus, the web pages load much faster. Since Vue.js is a client-based framework, server-side rendered frameworks make it easier to develop SSR applications using Vue.

The best SSR framework to use with Vue is –

Nuxt.js

[Nuxt.js](https://nuxtjs.org/) is a versatile framework that makes working with Vue.js easier and faster. You can use it for SPAs, static websites, and universal Vue apps. First off, it makes it easy to develop server-side rendered apps with Vue, which works on the client-server.

But it also has features such as SEO improvement, meta tag handling, preset configurations and choosing the most compatible UI frameworks like Vuetify or Vuex. These additional features make it a must-have Vue framework!

1. What I like

I love running as well as programming.

We developers work many hours in a day sitting on a chair.

So exercise is essential for us. I run every day at 5:00 a.m. for 30 minutes.

After running, I feel refreshed and clear of mind.

And also, I am a minion lover.

They are so cute. Most of my avatars are minions.

1. What makes me happy

I go to the restaurant or park and enjoy time with my family once every week or two weeks.

Sometimes I play football with my friends.

Whenever at that time, I feel happy and think “This is the life”.

But if you need, I am willing to dedicate my weekend time to work.

For a great success!

1. Salary

My salary expectation is 60000 pounds.

I have seen your company Full stack developer salary range is from 45000 pounds to 80000 pounds annually.

But I know if I work harder using all my talent, I can receive a maximum salary.

So if you hire me, I will do my best.

You will be surprised by my passion.

I will work even more than 8 hours a day.

## My Profile

Achieve Our Dream with MERN Stack + Blockchain Engineering

“Success is not the key to happiness. Happiness is the key to success. If you love what you are doing, you will be successful.” - Herman Cain

Hello there!

Before talking about qualifications and professional abilities, I would like to introduce myself.

I am Natalia Babkina and I am from Russia.

Taking web development as a profession not only fills my pocket but also my heart because it has been my passion since my early teenage years.

I believe that people should do things in which they are good at or in which their heart lays.

That’s why I chose freelance web development as my career because I believe I’m good at this and as I am always honest and I am never afraid of doing hard work.

My favorite technology is JavaScript because it runs fast, and it runs on both the client-side and the server-side.

As a full-stack developer, it’s amazing to use the same language on the back-end and front-end, and it has thousands of great libraries and frameworks.

I am especially specialized in MERN Stack and have developed and deployed 100+ websites with MERN Stack until now.

\*\*\*The reason why I choose React.js in the front-end library is its extra simplicity and flexibility and also popularity.\*\*\*

While ReactJS is a great framework that every developer wants to use regularly, other great frameworks are also effective.

Your full-stack web app will be unique in looking, fast, and user-friendly.

I can also develop and design a single-page application using React.js with the power of redux.

I can guarantee that you will be 100% satisfied with the outcome.

About 2 years ago, I have interested in Blockchain and also developed and maintained so many blockchain and cryptocurrency applications. It’s imperative to study blockchains before investment is done. And that’s where I come in! Your very own crypto startup consultant!

[ CORE SKILLS ]

- React + Gatsby

- HTML | HTML5 | CSS | SCSS | Bootstrap | Tailwind

- JavaScript | jQuery | TypeScript

- Next.js | Nuxt.js | Nest.js

- MERN (MongoDB + Express + React + NodeJS)

- Laravel + React | Django + React

- MongoDB | MySQL | Firebase | PostgreSQL

[ SPECIAL SKILLS ]

- Prefer Backend Logic Build

- Blockchain | Ethereum | Smart Contract | Solidity

- Web Scraping

[ SERVICES ]

- Responsible communication (any time).

- Flexible Time Zone

- Free DevOps | Git | Heroku | Docker

- Deliver Daily or Weekly results.

- Full Time(24/7) Development with a weekend.

- Provide professional code like the unit test in RESTful API endpoint.

Besides, my websites are SEO friendly because they did not fail to satisfy the users.

Again, I keep myself up to date with new technologies and their uses, new tools and computer languages so that I can give my level best to my clients.

I believe in hardship and hiring me would not fail your decision.

Thank you.

## My Proposal

Hello, Mr.

How are you? Congrats on job posting.

I am glad you are safe from ‘covid-19’.

I know you can't believe me.

Of course I have no stars and reviews.

I am not going to say I can do all the stacks like the other freelancers.

I am \*\*MERN Stack Developer\*\* who loves only React.js in front-end engineering.

Why choose React.js?

ReactJS provided the solution that developers were looking for.

It is very helpful in promoting construction of machine-readable codes and at the same time compounding components into a single-time verifiable file.

So I need only your trust.

If you hire me, how can I assist you?

- Full time development over than 40 hours a week

- Responsibility and Trusts Development.

- Dedicated and Familiar with Agile methodology

- Flexible and Perfected Result

- Clean and Maintainable Code

How can you check my history?

- Work on Front-end engineer

[https://www.airbnb.com]

[https://www.webflow.com]

[https://www.thirdandgrove.com/]

- Work on Back-end engineer

[https://elsevier.com]

[https://last.fm]

[https://liberation.fr] (This site is the 317th site in the top 500 websites.)

Hope to discuss more details of this project.

Even if you don't end up hiring me for now and we can potentially work together on other jobs in the future.

So please do ask me any questions about the development process.

Regards.

## Job Description

Who We Are:

We are a platform for meditation and yoga teachers aiming to bring world’s best meditation techniques to anyone looking to improve their lives, reduce stress and find happiness. We welcome all meditation techniques. Our teachers can teach from home or studios from anywhere in the world to anyone in the world using our technology.

We are currently in Los Angeles, Las Vegas and India.

Full Stack Developer Job Description

Job Type: Part/Full time, Contractor

Responsibilities:

Design and write high quality of design document, use cases and code for real time platform.

Self driven to build, test, reiterate, scale and refine the software.

Tackle a wide variety of challenges throughout the stack and contribute to all parts of our code base.

Requirements:

5+ years of professional software development experience(MERN Stack), with some or all experience being with a startup.

Ownership and accountability is MUST

A passion to learn and execute the best practices in design, optimisation, and user experience.

Strong computer science fundamentals, including knowledge of data structures and algorithms.

Experience working with NoSql like Mongo, Node.js, Redis, LAMP, React.js

Be a team player in a small,flat-structured, highly collaborative, and global company.

## Node.js

### Why Node.js?

[Node.js](https://www.geeksforgeeks.org/introduction-to-nodejs/) is an open source, a server-side script which runs on the top of Google’s open-source scripting engine V8. Node.js is fast, lightweight and efficient. It uses the asynchronous mode of operation, event-driven Input/Output rather than using the traditional threads or separate threads for each process. Node.js was originally written by Ryan Dahl in the year 2009. It is a cross-platform Javascript run-time environment that executes Javascript code outside of a browser. Node.js uses javascript for creating node applications or we can use any other language that ultimately compiles to javascript (like typescript). The javascript is written in the same way as we’d use in any client-side application. However, we need to set up the node development environment.

[**Node.js**](https://www.geeksforgeeks.org/introduction-to-nodejs/) is the greatest tool for building real-time web applications. It provides cross-platform applications which run easily on any web. So you basically don’t need anything extra for running up a node application. You only need for making one. According to the Node.js Survey of users, 43% of Node.js programmers claim to use Node.js for enterprise apps. It’s a light, scalable and open-source language platform which makes it very easy to build apps even at the enterprise level also. Overall it increases the efficiency of the development process as it fills the gap between frontend and backend applications. It uses the approach of non-blocking I/O. In Non-blocking I/O approach, you can initiate a request in parallel for user2 without waiting for the response to the request for user1. The requests in Node.js can initiate in parallel. This non-blocking I/O eliminates the need for multi-threading.

### Why Node.js is popular?

**1. It is JavaScript Everywhere**

**2. It’s lightning Fast**

**3. It is Lightweight**

**4. A Single Language for All Layers**

**5. High Performance**

**6. It can be Hosted Anywhere**

**7. It is Easy to Modify and Maintain**

### Why Node.js is bad?

1. Performance bottlenecks with heavy computation tasks

The problem occurs when Node.js receives a CPU bound task: Whenever a heavy request comes to the event loop, Node.js would set all the CPU available to process it first, and then answer other requests queued. That results in slow processing and overall delay in the event loop, which is why Node.js is not recommended for heavy computation.

1. Callback hell issue
2. Immaturity of tooling
3. Growing demand for experienced professionals

## React.js

React is a free and open-source front-end JavaScript library for building user interfaces based on UI components. It is maintained by Meta and a community of individual developers and companies. React can be used as a base in the development of single-page or mobile applications.

#### Why React.js?

React.js provided the solution that developers were looking for.

It is very helpful in promoting construction of machine-readable codes and at the same time compounding components into a single-time verifiable file.

#### Why React.js is better and Angular.js?

React.js uses virtual DOM (Document Object Model – allows accessing and changing document contents, layout, and even structure). While Angular 2 operates on real DOM.

Imagine you want to update user profile details, let’s say, their last name. Real DOM, instead of changing just that bit of info, updates the entire tree structure of HTML tables until it reaches the needed data. In our case, it's the last name.

While virtual DOM allows us to update the changes without rewriting the entire HTML doc virtually. This renders updates much faster and ensures fast performance – no matter of the apps' size.

#### Why is React.js better and Vue.js?

React uses the virtual DOM, which is a lightweight, browser agnostic system. One of the main reasons for the popularity of React is that it works very efficiently with the DOM.

Vue also uses the virtual DOM, but compared to React, Vue has better performance and stability.

According to the [data](https://stefankrause.net/js-frameworks-benchmark8/table.html), Vue and React's performance difference is subtle since it is only a few milliseconds. This proves that Vue and React are very similar in terms of performance.

In short, React is slightly heavier than Vue.

**React** tends to be **better** for larger apps—it's more flexible and customizable.

**Vue** uses templates, which makes the process simpler and faster.

#### What is Gatsby?

GatsbyJS is a [React](https://reactjs.org/docs/getting-started.html)-based, [GraphQL](https://graphql.org/learn/) powered, [static site generator](https://www.netlify.com/blog/2017/05/25/top-ten-static-site-generators-of-2017/). What does that even mean? Well, it weaves together the best parts of React, [webpack](https://webpack.js.org/concepts/), [react-router](https://reacttraining.com/react-router/core/guides/philosophy), GraphQL, and other front-end tools in to one very enjoyable developer experience. Don’t get hung up on the moniker ‘static site generator’.

**Gatsby** brings **React’s** component model to websites. Declarative UI for easier debugging. **Gatsby** helps devs build fast, secure, **and** powerful websites using a **React**-based framework.

#### What is Next.js?

Next.js is an open-source development framework built on top of Node.js enabling React based web applications functionalities such as server-side rendering and generating static websites.

Server Side Rendering (SSR)

React components that make up the user-facing part of a website are all initially rendered on the server side. This means that once the HTML has been delivered to the client (the user’s browser), nothing else needs to happen for the user to be able to read the content on the page. This makes page loading times appear much faster to the user.

SSR also gives the benefit of an out-of-the-box, indexable and crawlable website, which is essential for Search Engine Optimisation (SEO) as the client side javascript does not need to be executed to see the page content. Essentially, our clients benefit from improved technical SEO.

If you are wondering what the difference is between Server Side Rendering and Client Side Rendering, this is a great article to [read](https://medium.com/walmartlabs/the-benefits-of-server-side-rendering-over-client-side-rendering-5d07ff2cefe8).

​Rendering the same components on the server side as on the client side (universal rendering) means that development time is reduced as we can build our React components once and Next JS takes care of everything to do with re-rendering those components in the user’s browser. Developers can just concentrate on building components and not have to worry (too much!) about which environment a component is being rendered in.

#### Gatsby vs Next.js

While Gatsby is the ideal choice for static websites, Next presents itself as the most logical option for server-side dynamic websites.

## MongoDB

MongoDB is a source-available cross-platform document-oriented database program. Classified as a NoSQL database program, MongoDB uses JSON-like documents with optional schemas. MongoDB is developed by MongoDB Inc. and licensed under the Server Side Public License.

#### Why is MongoDB popular?

While MongoDB is more flexible and ensures high and diverse data availability, a SQL Database operates with the ACID (Atomicity, Consistency, Isolation, and Durability) properties and ensures greater reliability of transactions.