

Linus Norton

Software engineer, architect and technology leader

Summary

Technology leader with in-depth knowledge of Agile software development, software design and team building.

Excels at building productive teams by ensuring effective software development processes are in place, the team is aligned towards the same goal and motivated to achieve it. Leads the team by example, setting the technical standard for the team to follow including test driven development and good software design.

Areas of expertise include software architecture, highly available distributed systems, continuous integration/deployment, DevOps, testing, design patterns, object oriented design, functional programming, development methodologies and team building.

Experience

Founder, Planar Network | February 2018 - present

- Developed the world's first rail ticketing system and portable wallet on a blockchain using **Ethereum/Solidity**
- Developed a best in class multimodal journey planner, competing against established companies with over £100m in funding
- Created and presented the white paper, concept and business model
- Developed a wide array of open source tools for processing and managing public transit data using **node.js/TypeScript**

Chief Technology Officer, Assertis Ltd | October 2013 - February 2018

- Created a highly effective Agile team in a high risk, heavily regulated industry competing against multinational corporations, scaling from 2 to 16 developers
- Enabled the business goals by increasing visibility and planning effectiveness using **Scrum**
- Re-architected legacy systems to a **Microservices Architecture** that enabled rapid development of new features and products
- Implemented a modern software development environment by setting up **Continuous Integration, Continuous Deployment**, automated Selenium testing and virtualized development environments using **Vagrant**

- Migrated from a managed hosting environment to a fully automated (**Ansible**) AWS environment
- Maintained an excellent uptime across **web and mobile platforms** that retail tens of millions of pounds a year
- Raised the company profile by speaking at industry events and open sourcing internal libraries

Chief Technology Officer, On Track Retail | September 2014 - April 2016

- On secondment from Assertis to launch a joint venture with a FTSE 250 company.
- Created an entirely new team of 25 developers (only using a recruiter once) and met a very ambitious, immovable deadline
- Architected a highly available ticket retailing engine using **Scala** microservices, **RabbitMQ** and a **Galera** DB cluster
- Designed a robust set of **RESTful APIs** and JSON protocols

Web Developer, BBC | January 2013 - September 2013

- Development of the next generation CMS in **JavaScript** using **Backbone.js** and **Underscore.js**
- Design of key architectural components and moving the team to a more functional programming approach using **Underscore.js**
- Mentored developers on best use of **RequireJS**, **Backbone.js** and **unit testing** with **dependency injection**
- Improved the build tools by moving to **node.js** and **Grunt** with support for **Jasmine** and **JSHint**

Team Lead, BraveNewTalent | October 2011 - January 2013

- Leading a team of developers to deliver an enterprise solution using **PHP** and **JavaScript**
- Contributing to the redevelopment of the software platform using **PHP**, **Symfony2** and **CoffeeScript**
- Mentoring developers on **object oriented design**, **Agile** software development and **unit testing**
- Implementation of best practices across all teams including **Scrum**, **continuous integration**, **unit testing** and **continuous deployment**
- Acting as **Scrum master** for development teams

Lead Developer, MyTrainTicket | March 2010 - October 2011

- Development of a large scale train ticket issuing system (TIS) that integrated with financial and rail systems using **PHP**, MVT Javascript (**Backbone**, **Underscore**), **Sass**, **Java** and **Python**
- Implementation of **unit testing** and **continuous integration**
- Responsible for all servers and server applications (**Apache**, **PHP**, **MySQL**)

Senior Developer, Assertis Ltd | February 2007 - March 2010

- Development of the company CMS using **PHP**, **JavaScript**, **MySQL** and **XSLT**
- Quality assurance and progression of developers coding standards.

Skills

Back End Programming

Node.js (ES6 / TypeScript), PHP (Silex, Symfony2), Scala (spray, slick3), Solidity, MySQL, Elasticsearch, Java

Front End Development

JavaScript (ES6 / TypeScript, React), HTML5, CSS3, Sass, Less

System Administration / DevOps

AWS, Linux, Apache, nginx, MySQL, Galera cluster, HAProxy, Vagrant, Ansible, Jenkins

Domain Knowledge

OO design, functional programming, software architecture, high availability, scalability, continuous integration, unit testing, design patterns, web services, Agile, Scrum, Kanban, product development, Lean, algorithms

Open Source Contributions

dtd2mysql (<https://github.com/planarnetwork/dtd2mysql>)

transxchange2gtfs (<https://github.com/planarnetwork/transxchange2gtfs>)

Grunt Parallel Behat (<https://github.com/linusnorton/grunt-parallel-behat>)

Dev Sourcr (<https://github.com/linusnorton/dev-sourcr>)

MMOGOL (<https://github.com/linusnorton/mmogol>)

Talks & Articles

I have given numerous talks at conferences (including PHP Conf and HackTrain) and meetups covering topics from blockchain technology to Lean and Scrum. I maintain a blog that contains posts on software design, languages and style: <https://ljn.io/>

Education & Qualifications

University of Kent - BSc in Computer Science with Honours (2:1)

Norwich City College - BTEC National Diploma in Computer Software (Distinction)