Kevin Tudal Allain

Résumé

Experience

2017-2022 (Over 4 years)	**PhD of Computer Science**, *City, University of London*. ○ Produced an analysis of the latest research in the field of data visualization related to movement analysis. ○ Set up a felxible data workflow for inclusion of diverse external sources based on JavaScript, Express.js, MongoDB. ○ Developed data visualization programs to support discussions for the thesis included working with D3.js. ○ Automated generation of stimuli for studies using Puppeteer.js and incorporation into JSON-based surveys. ○ Produced data analysis of collected responses based on both statistical and visual analysis, using R and Tableau.
2017-2021 (3 years)	**Teaching Assistant**, *City, University of London*. Supported teaching and accompaniement of undergrad and postgraduate students. Technologies discussed with students include Processing, Java, Python, LitVis.
2016-2017 (1 year)	**Research assistant**, *Imperial College London, within the Data Science Institute*. This work involved several technologies such as Javascript, Babylon.js, C#, .NET Core, Python, Excel and Spotfire. ○ Achieved a scale-accurate visualization of stars in the universe based on official records displayed in a CAVE environment. ○ Collaborated with external collaborators, producing data analysis for diverse subjects, aided with visualizations displayed in a CAVE environment.
2016 (4 months)	**Software Developer**, *European Bioinformatics Institute*. Expanded the biosamples search engine of the EBI by developing a visualization using d3.js to display an layered aggregate of biosamples returned from queries.
2015 (6 months)	**Internship**, *European Patent Office*. Introduced and developed a new document triage prototype on a large multi-touch device. The prototype was developed in JavaScript, using Node.js. The data was loaded using D3.js, and the tactile interactions were coded using the Multitouch Cornerstone SDK. `http://bit.ly/1Uyp8g8`

Education

2017-2022	**PhD of Computer Science**, *City, University of London*. Thesis: `https://bit.ly/3DYq0o3`
2013-2015	**EIT Digital: Double Master Degree of Computer Science with a minor in Entrepreneurship**, Theses: `http://bit.ly/1mZCAuD` . ○ First year in KTH, Stockholm, Digital Media Technology ○ Second year in TUDelft, Delft, Medical Imaging
2010-2013	**Bachelor Degree of Computer Science**, *University Pierre et Marie Curie Paris 6*.

Academic and Personal Projects

July 2015	**Developed a video game in 2 days during the GMTK Game Jam 2021**, *This video game was created using Unity, with adaptative 3D models.* `https://bit.ly/3puzsIZ`
May 2019	**Published a poster at the EuroVis conference**, *The poster introduced a taxonomy characterizing tasks, moving entities, context and methods used to compute or visualize data.* `https://bit.ly/3aZNLi2`
December 2015	**Developed a video game platformer during a 4 days game jam to teach linear algebra.**, *This video game was created using Unity, making use of online free models.* `http://bit.ly/1PHDbMD`
February 2015	**Developed a video game for training navigation skills of blind children that got published in the IEEE VR 2014**, *The video game was developed with Unity, making use of the Oculus Rift.*, `http://bit.ly/1K55elV`.

January 2015	**Image processing project**, *Image segmentation using MATLAB. The segmentation is done with three steps: oriented gradient, oriented watershed segmentation, region merging.* `http://bit.ly/1Rvb6bq`
July 2014	**Projects**.
	○ **EmoViz**: Visualization tool for an emotion recognition program. The data is displayed on a HTML website using JavaScript to deal with interactions, D3.js and the Parallel NPM package to display the data. `http://bit.ly/1TzhUDQ`
	○ **ZebraKill**: 3D video game simulation of zebra flocking with predator/prey interactions. Animations of the models made with Blender. `http://bit.ly/1QlM9wN`
2014 (6 months)	**Built a startup with other students during my first year of master**, *The website prototype was developed. I participated in its development in PHP using the Yii framework, and developed its interactions with JavaScript..*

Programming skills

Specialized in:

○ **Data Analysis** Python, R, Tableau, Excel

○ **Web Programming** JavaScript, HTML, CSS

○ **Data Visualization, 3D rendering and game engine** D3.js, Babylon.js, Three.js, Unity

Also skilled in:

○ **Software engineering** C#, Java, C, C++,

○ **Scientific Programming** MATLAB, Scilab, LaTeX reporting

○ **Code management** GitHub, SVN

○ **Server-side** Node.js, Express.js, npm, Apache Tomcat

Languages

French	**Mother tongue**
English	**Fluent**
Spanish	**Intermediate**

TOEFL 2013 IBT score: 101/120

Operating Systems

Mac OS X, Debian/Ubuntu Linux, Windows

Interests

Guitar	Over 15 years of playing guitar, alone or within a band
Sport	Rock climbing, thai boxing, tennis, french boxing

Miscellaneous

Coding	Started the development of a story driven action game on Unity.
Business	Developing a social media based on geographical content.