Kevin Tudal Allain

Résumé

Experience

2017-2022
(Over 4 years)
PhD of Computer Science, *City, University of London*.
- Analysis of the latest research in the field of data visualization related to movement analysis.
- Set up of data workflow flexible for inclusion of diverse external sources based on JavaScript, Express.js, MongoDB.
- Development of 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.
- 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*.
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 and Spotfire, displaying visualizations within a CAVE environment.

2016
(4 months)
Software Developer, *European Bioinformatics Institute*.
Developed a visualization using d3.js to display an aggregate of biosamples returned by their search engine.

2015
(6 months)
Internship, *European Patent Office*.
Developed a new document triage prototype on a large multi-touch device. The prototype was developed in JavaScript, using Node.js. The data is loaded using D3.js, and the tactile interactions are 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**	*TOEFL 2013 IBT score: 101/120*
Spanish	**Intermediate**	

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.