

Portfolio et Experiences

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VoR Immobilier _ 2015 - 2022



C++	Python	Bash	Node JS
<p><u>UE4 Plugins :</u></p> <p>Interactions VR Oculus Interactions Leap Motion</p> <p>Custom 360° video renderers Video Path constructor semi automatic Automatic 360 tour with navigation UI</p> <p>Communication with webapp for external UI and video streaming</p> <p>UE4 sources modifications for workflow automation and to fix included plugins</p>	<p>Detection and classification of appartement objects from image, pdf and DWG (Structures, furnitures, text)</p> <p>Integration of deep Learning Models into the 3D reconstruction workflow</p> <ul style="list-style-type: none">• CNN for structures and objects detection• GAN for furnitures position generation <p>3D=>2D conversion for the learning databases</p> <p>2D graph constrained with active contour model for appartement shape matching</p>	<p>Jenkins nodes for : rendering, learning, predicting, packaging</p> <p>Data files management and transfer</p>	<p>Personalization of annotation interface for PDF/image plans</p> <p>Company portfolio</p>

Environment / Tools : Windows & Unix / Docker, Kubernetes, Jenkins, S3 (Scaleway)

* As a company co-founder 20% of my time was taken by : management, production, business decisions, grant files

Medcare Evolutions_ 2013-2015



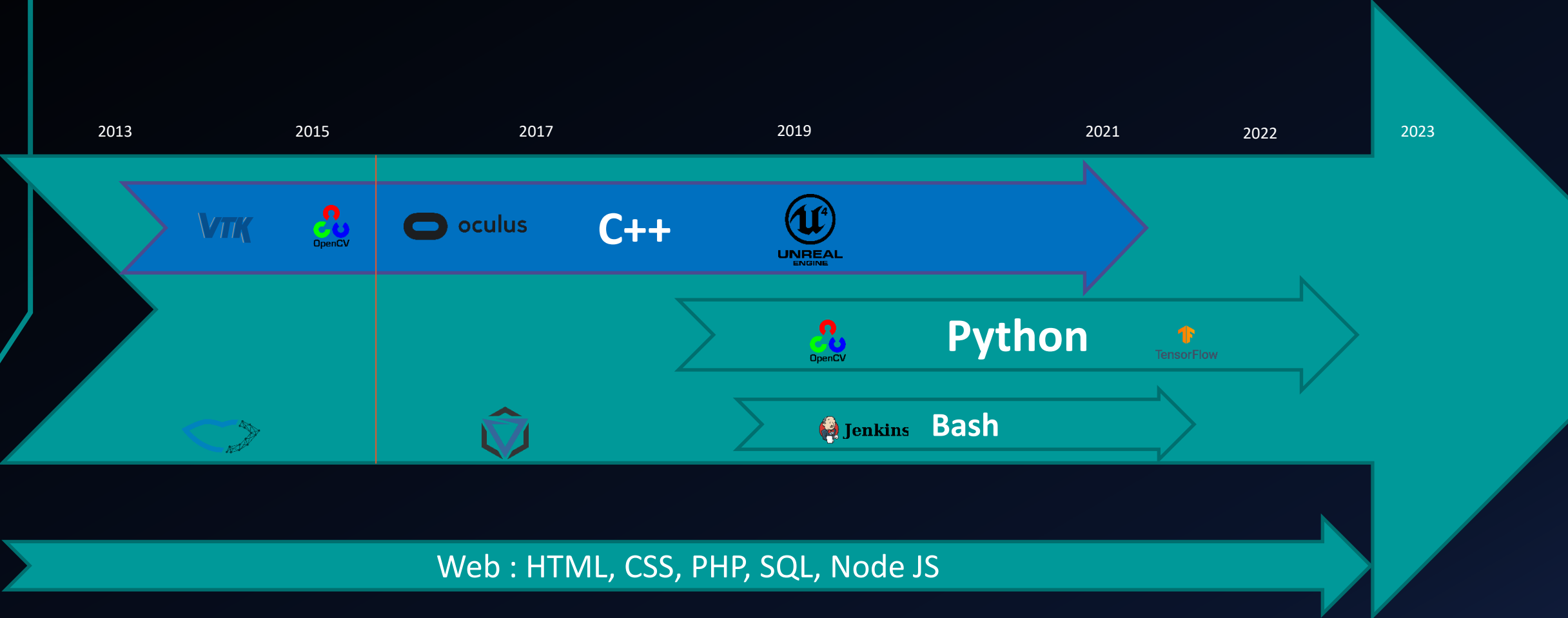
An automatic 3D face reconstruction from 2 pictures

C++

- Face Features extraction– OpenCV
 - OpenCV Haar System
 - Custom implementation from research paper for eyes, nose extraction
 - Lips shape extraction with Active Shape Model ('Smart Snake') based on several color spaces
- 3D face reconstruction – VTK
 - Fast 3D deformation of an existing 3D model
- Skin shader generation
 - Merge of 2 corrected and deformed pictures
- Software UI with Landmarks correction, VTK 3D Engine embedded in a Qt UI
- Cmake compilation and packaging for Windows

* As the company president 40% of my time was taken by : business decisions, professional exhibition

Timelapse of languages used



2013

2015

2017

2019

2021

2022

2023

VTK



Oculus

C++



Python



Jenkins

Bash

Web : HTML, CSS, PHP, SQL, Node JS

Interests

IA & Computer Vision	Data Representation	Project Management
<ul style="list-style-type: none">• Image processing• Image Generation• Deep Learning	<ul style="list-style-type: none">• 3D Workflow• Data transformation for training	<ul style="list-style-type: none">• Software Architecture• Basic DevOps & software automation• Team management

Preferred sectors : HealthCare, Blockchain & web3, autonomous driving