

SOURIGNA SIMMALAVONG

SOFTWARE ENGINEER

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PROGRAMMING LANGUAGES / LIBRARIES

- ▷ OOP [C++](#), C#, Java, OCaml
- ▷ Computer Vision iisu SDK (body and [hand gestures](#) development platform), OpenCV, Point Cloud Library
- ▷ Video Games PlayStation Portable Runtime Library
Virtools SDK
- ▷ Graphics OpenGL, XNA
- ▷ GUI WPF, Qt
- ▷ Scripting Python, Ruby, Bash, Batch, VBA
- ▷ Unit Tests googletest, NUnit

PROJECT MANAGEMENT

- ▷ Agile [Scrum](#), [XP](#), Test Driven Development, Crucible (Code Review)
- ▷ Issue Tracking Jira, Redmine, Trac
- ▷ Versioning Git, SVN, Plastic SCM, AlienBrain
- ▷ Project Management Microsoft Project, Umbrello

SOFTWARE

- ▷ IDEs Visual Studio, IntelliJ IDEA, Netbeans, Eclipse, Emacs
Intel Parallel Studio, GDB
- ▷ OS Windows (7, Vista, XP, ...), Unix (Ubuntu, FreeBSD, ...), Linaro
- ▷ CAD Photoshop, Lightroom, InDesign, Maya, 3DVIA Virtools

LANGUAGES

- ▷ French Native
- ▷ Japanese Basics
- ▷ English Bilingual
- ▷ Dutch Basics

ACTIVITIES / INTERESTS

- ▷ High-Tech Computer science, Video Games, Former Computer Science lecturer at GConf
- ▷ Hobbies Qwan-Ki-Do (Martial arts) at European level, Guitar, Singing

EXPERIENCE

Research and Development Engineer

SoftKinetic

Intel Perceptual Computing - Gesture Recognition optimization.

R&D Engineer on a Gesture Recognition API (automotive context).

Software Engineer (Tools)

SoftKinetic

Development and maintenance of iisu SDK Tools.

Lead engineer on WPF solutions.

Lead engineer on FlexNet Publisher.

Gameplay Engineer

Chapatiz (TOM Project)

Lead engineer and architect on an online fighting game.

Project Management (Scrum, MS Project).

Flash Engineer

French Government Information Service (SIG)

Lead engineer and global architecture.

PSP / Virtools Engineer

Dassault Systèmes - 3DVIA

Update of *Virtools PSP module*.

Technical scenes optimization.

Tester and technical adviser.

Present

Jun. 2012

Jul. 2011

Nov. 2010

Jul. 2010

Feb. 2010

Sept. 2009

Sept. 2008

branch_engineer

branch_teacher

EPITA

Master's degree in Computer Engineering. Multimedia and Information Technologies (MTI)

Workshop Assistant

Polytechnic Institute of Bragança (IPB - Portugal)

In charge of Flash / ActionScript3 trainings (teaching, syllabus writing, degree ceremony, ...) for undergraduate students in Game Design. C++ syllabus adviser.

Mar. 2011

Workshop Assistant

Sup'Biotech Paris

Java / UML Workshops for students in biotechnology master.

Caml / Delphi Workshop Assistant (ACD)

Ecole Pour l'Informatique et les Techniques Avancées (EPITA)

Caml / Delphi Workshops for undergraduate students in Computer Engineering.

CAR API

Gestures API in an automotive context.

2012 - present (1 year)

R&D Engineer (5 people)

- Elaborate the main algorithms for real-time gestures recognition.
- Improve and guide the development process.
- Successfully contributed to the quality of critical milestones.
- Improve system with researches on Gestures User Experience.
- Automatized and developed productivity tools.
- Drove the team to achieve better code quality (Unit tests, Continuous Integration, ...).



Computer Vision, C++, Research, Agile, Unit Tests, Qt, Windows, Unix, Jenkins



Intel Perceptual Computing SDK

SoftKinetic Close interaction SDK.

2012

R&D Engineer (14 people)

- Elaborated an algorithm for hand state recognition (opened / closed).
- Optimized the performances of the SDK.



Computer Vision, C++, Optimization, 3D, Research

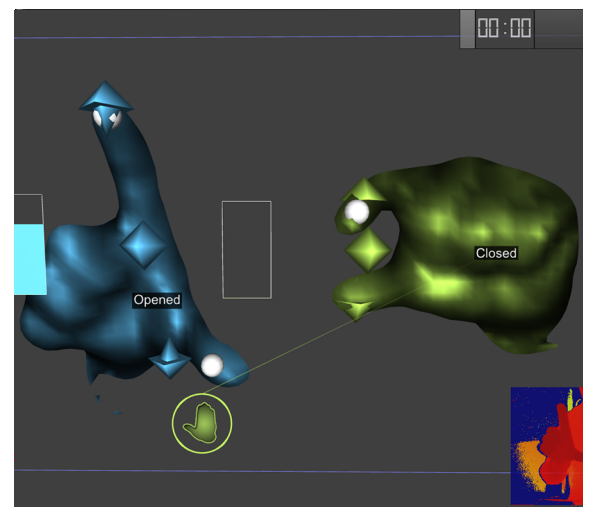
iisu Tools - Welcome to iisu

Software Suite.

2011 - 2012

Technical referent (4 people)

- Contribute to technical decisions and sprints management.
- Established entire life process for online samples deployment.
- Technical referent for WPF projects.
- Development on 7 different projects with various technologies.
- Integration of iisu Close Interaction (hand gestures recognition).
- GUI design and development.
- Integration of FlexNet Publisher licensing system.



C#, Scrum, XP, Code Review, C++, WPF, OpenGL, Qt, Unit Tests, Windows, Unix



Adobe

Stream PARTY

24h rush, Architecture, Social Network, Flash, ActionScript3, Photoshop

Adobe RIA Cup Award Winner

Stream Party : Social application

2011 (24 hours rush)

Team leader (2 people)

- Designed and developed the global architecture.
- Integrated Webcam and Facebook API logic layers.
- Designed and developed the GUI.

French Government contest Winner

Gouv Bureau: French government orgachart.

2010

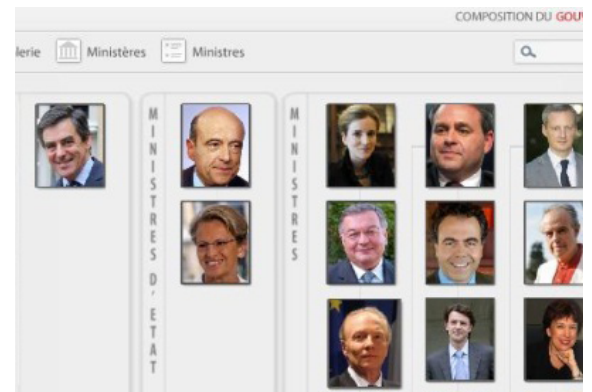
Team leader (6 people)



Liberté • Égalité • Fraternité

RÉPUBLIQUE FRANÇAISE

- Team management with developers and artist.
- Successfully translated customer objectives and strong constraints into an efficient and cutting-edge solution.
- In charge of the global architecture of the application.
- Developed two of the three main views.



Architecture, Team management, Flash, ActionScript3, Papervision3D, Windows



PlayStation® Portable

C++, OpenGL, PSP, Optimization, VSL, Documentation, Testing, Windows

Virtools PSP Module

PSP module for prototyping.

2009 - 2010

Game Engineer (Solo project)

- Updated, corrected and improved Virtools PSP module.
- Adapted and optimized a golf technical scene from Wii to PSP.
- Wrote technical reference papers and updated documentation
- Advised customers on Virtools best practices.
- Thoroughly ran and improved functional tests.
- Designed and developed the PSP module install program.

