

# AGHILAS SINI

## Research And Development Engineer (2 ans d'expérience)

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### SKILLS

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#### Développement web Front

JavaScript, jQuery, Ajax  
CSS3, Bootstrap 3, HTML5

#### Simulation/Calcule Numérique

Matlab, Octave

#### Gestion de Génération/ Scaffolding

Bower, Yeoman, Grunt, NPM

#### Machine Learning/Data Science/Robotic

DL4J, Theano, TensorFlow, R, ROS

#### Programming

Shell script, Windows Batch script, Jython  
C, C++, Java, Python

#### Protocols & APIs

XML, JSON, SOAP, REST

#### Méthode / Analyse

Méthode UML, Agile(SCRUM)

#### Gestion de configuration/Industrialisation

Git, Maven3, Jenkins

### EDUCATION

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2014	<b>Master 2 - Artificial Intelligence, Pattern Recognition and Robotics</b> <i>University Paul SABATIER- TOULOUSE. France</i>
2013	<b>Master 1 - Real Time Systems Engineering</b> <i>University Paul SABATIER- TOULOUSE. France</i>
2011	<b>B.Sc - Control System and Automation</b> <i>University Mouloud MAMMERI- TIZI OUZOU. Algeria</i>

## EXPERIENCE

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### January 2016 - March 2016

#### Enseignant Vacataire

*IUT Charlemagne, Université de Lorraine, Nancy. France*

#### Principaux domaines d'intervention

- Introduction à la programmation Web - Front end
- Cours avancé en JavaScript, JQuery, Ajax, Rest.
- Mini Projet.

#### Environnement Technique

- JavaScript, JQuery, Ajax, JSON, Rest.

### January 2016 - Present

#### Ingénieur de Recherche et Développement

*LORIA-INRIA Nancy Laboratory. France*

*IFCASL Project Individualized Feedback for Computer-Assisted Spoken Language Learning*

#### Principaux domaines d'intervention

- Modification and re-synthesis of learner audio samples using teacher audio samples based on Pitch Synchronous Overlap and Add algorithm
- Feedback to correct devoicing of final consonants in French spoken by German learners
- Improving speech text alignment for language learning using deep neural network, training network with theano and decoding with DL4J (IFCASL Corpus)
- Extraction of speech features for pitch detection using deep neural network

#### Environnement Technique

- Java, Python, TensorFlow, Theano, R

### November 2014 - December 2015

#### Ingénieur de Recherche et Développement

*LORIA-INRIA Nancy Laboratory. France*

*ORTOLANG Project Open Resources and TOols for LANGuage*

#### Principaux domaines d'intervention

- Development of syntactic-semantic analyser for spoken documents in French language - open source tool J-Safran released by LORIA. Includes dependency parser for oral speech and inclusion of inference of partial semantic role labels on top of syntactic parsing
- Tool for semi-automatic alignment of speech and textual corpus - open source tool JTRANS released by LORIA. Working on correction of speech text alignment around silence segments.
- Interactive tool for speech signal processing and phonetics - open source tool JSnoori released by LORIA. Development of module for pitch estimation

#### Environnement Technique

- Java, Jenkins, Git, Linux, Yoeman, Grunt, Bower ,NPM