****

**Hardware and Software Engineering**

**TECHNICAL SUMMARY**

**Operating Systems** : Unix, Linux, Windows 7

**Languages** :React Native, Java, Java Swing, Android, Verilog, VHDL, C, MATLAB, C++

**Software** :Android Studio, Eclipse, NetBeans, Notepad++, Git, SVN, Brackets, CodeBlock, Microsoft Visual Studio, Adobe Photoshop

**Hardware** : FPGA, RISC microprocessor, LatticeECP3 Video Protocol boards

**Web development** : Prestashop, Laravel, Servlet and JSP, HTML5, CSS, JavaScript, JQuery, MySQL, PHP, Adobe Dreamweaver, Drupal

**Office** :Word, Excel, PowerPoint, Open office

**EDUCATION**

**2012 – 2014** : **Université Paul Sabatier** – **Toulouse, France**

*Master's degree in Embedded Systems - Hardware and Software Engineering*

**2010 – 2011** : **ENSEEIHT – Toulouse, France**

*Master's degree in Telecommunication and IT*

**2005 – 2010** : **Institute of Technology of Cambodia** – **Phnom Penh, Cambodia**

*Bachelor's degree in Electrical and Energy Engineering*

**HONORS**

SUMITOMO Scholarship, 2009

Agence Universitaire de la Francophonie (AUF) Scholarship, 2010

**ACADEMIC PROJECTS**

RISC microprocessor design, December 2012 – February 2013

Renewable Energies Investment Calculation (Group of 3 members),October – December 2009

Electric Power Supply in Industry,April – June 2009

**EXPERIENCE**

**Software Developer**

*ALLWEB, Cambodia*

December 2016 – Present

* Team Leader of 2 or 3 members at AllWeb
* Working on Microsoft Excel VBA: IFRS project
* Working on E-commerce Prestashop project. Features: module marketplace, mangopayment, eventmanager, ...
* Working on React Native project. Features: Push Notification, QR code, RealmJs, ...
* Using SCRUM methodology to manage the project: Bitbucket, JIRA and Confluence
* Working Environments: PhpStorm, SourceTree, Visual Studio Code, Atom, Sublime, Wamp, ...

**Smart Energy Hackathon Cambodia**

*EnergyLab Asia, Cambodia*

3 days (20th, 27th and 28th October 2018)

* One of the 5 Challenge Winners
* Working on a challenge of "Trust in Solar" from SNV: Problem and Solution, Business, Marketing, and Pitching
* Trust Energy Team of 4 members
* Challenge on SNV Trust in Solar: this challenge is to find a way for potential customers of solar systems in rural areas to find solar companies and rate their products & services in order to address the issue of trust, repairs and accountability.

**Speaker (1 hour) - Modern JS ES6 and ES7**

*BARCAMP ASEAN 2018, Cambodia*

21st October 2018

* Sharing knowledge on Modern JavaScript ES6 and ES7

**Speaker (1 day) - "Version Control with GIT" Workshop**

*INSTINCT INSTITUTE, Cambodia*

22nd September 2018

* Sharing Knowledge on: how to set up Git, Sourcetree and Bitbucket, basic usage of git, Git workflow, branching and merging, how to solve conflict, how to stash and much more

**Speaker (4 hours) - "Introduction to React Native" Workshop**

*University of Puthisastra, Cambodia*

29th September 2018 - from 1pm to 5pm

* Sharing knowledge via a weather application that covers some essentials of React Native including: using core and custom components, passing data between components, handling component state, handling user input, applying styles to components, fetching data from a remote API

**Volunteer (6 months) - Technovation Technical Mentor**

*Development Innovations, Cambodia*

December 2017 – May 2018

* Helping students to learn coding with App Inventor 2

**Volunteer (4 months) - STEM Robotic Mentor**

*STEM Cambodia, Cambodia*

January 2017 – April 2018

* Helping students to learn about STEM and assemble a remotely operated underwater vehicle (ROV) - Puffer Fish

**IT Lecturer (Part time)**

*INSTINCT INSTITUTE, Cambodia*

October 2017 – December 2017

* Handle Java Fundamentals subject

**IT Lecturer**

*Kirirom Institute of Technology – Kompong Speu, Cambodia*

November 2015 – October 2016

* Internship supervisor: drone programming project, projection mapping project, AI, EDM
* Teaching: Android, servlet&jsp, website development (HTML, CSS, JS), DBMS, MySQL

**Software Engineer**

*PATHMAZING Inc Company – Phnom Penh, Cambodia*

July 2015 – October 2015

* Android mobile software development: designing and customization UI, using third libraries (Blur Behind, HideOnScroll, SlidingLayer, Sliding Menu…), implementing functionalities, integrating social network (Twitter, Google, Facebook) and multiple languages (Khmer and English), designing, coding, debugging and testing
* Basic Knowledge of NodeJs: express framework, user management system, third libraries of NodeJs (Sequelize, MySQL, MongoDB, …)

**Hardware Engineer Intern**

*Enciris Technologies Company – Gaillac, France*

April 2014 – September 2014

* Design, develop, test, integrate, and verify FPGA designs for video processing hardware
* Working on the SDI video interface by demonstrating the implementation of a Lattice tri-rate SDI PHY IP core on a Lattice FPGA of the Enciris LT-125 board in order to provide an SMPTE 3G/HD/SD SDI video input functionality on the board without using any external chipset like the Gennum chipset which is used today on Enciris boards
* Working on the H.264/AVC video decoding algorithm, particularly the H.264/AVC bitstream decoder hardware architecture design and implementation

**Satellite Communication Engineer Intern**

*Telecommunications for Space and Aeronautics (TéSA) Laboratory – Toulouse, France*

March 2011 – August 2011

* Determination of the orbital mechanics for different type of orbit
* Optimization satellite constellation
* Calculation the link budget
* Analysis of the impact of orbit types, frequency band and modulation types on link budget

**LANGUAGES**

**French** : Good

**English** : Good

**HOBBIES**

Football, tennis, badminton, music