



# CHATHURA WIDANAGE

✉ [chathurawidanage@gmail.com](mailto:chathurawidanage@gmail.com)  
☎ +9472 962 460 5  
🌐 [cwidanage.com](http://cwidanage.com)  
📁 [github.com/chathurawidanage](https://github.com/chathurawidanage)

A responsible, adaptable and hardworking individual who loves to learn through experience. Looking forward for an opportunity to widen experience and knowledge while contributing to the advancing "Sri Lankan software" brand.

## EDUCATION

- 2012 - Current  
**University of Moratuwa**  
BSc Eng. Hons  
Specialized in Computer Science & Engineering  
GPA: 3.851/4.2
- 2012  
**Oracle University**  
OCPJP  
Oracle Certified Professional Java Programmer
- 2006 - 2011  
**Maliyadeva College**  
G.C.E. A/L  
Physical Science Stream  
3As  
District Rank 8 | Island Rank 135

## ACHIEVEMENTS

- Google Summer of Code 2016**  
DHIS2 - Developed longitudinal analysis module for tracker capture.
- Commonwealth Medical Association**  
24<sup>th</sup> Triennial Conference – DHIS2 Workshop  
Presented about custom web application development on DHIS2 platform.
- AngelHack Colombo '16** 1<sup>st</sup> Runner Up  
Developed an open source disaster response system
- Augmented Human Conference** Top 10  
2016 Geneva – Student Design Competition  
"Sense" wearable device which connects people
- Morahack 2.0** 1<sup>st</sup> Runner Up  
Developed a wearable tracker for elderly people
- IEEEXtreme 9.0** 6<sup>th</sup> Local | 153<sup>rd</sup> Global
- ExtremeCS 1.0** Winners  
Algorithmic Challenge Organized by ACM Student Chapter
- ACES Coders V5.0** 1<sup>st</sup> Runner Up  
Algorithmic Challenge Organized by University of Peradeniya

- Google I/O Extended Hackathon**  
Best user friendly application award for wearable device "Sense"
- Fugosticka 2.0** 2<sup>nd</sup> Runner Up  
Mobile game development competition organized by AIESEC.  
Developed the mobile game "Gravitrion Quest"

## EXPERIENCE

- 2016 Apr - Current  
**Health Informatics Society of SL**  
Software Developer Part Time  
Developing data analysis software, conducting workshops to train end users.
- 2015 Oct – 2016 Apr  
**Adroitlogic**  
Trainee Software Engineer  
Contributed to IPS - Project which brings ESB to the cloud(PaaS).
- 2014 - Current  
**Fiverr**  
Freelance Developer  
Android, Java and web application development.  
100% ratings | 200+ reviews.
- 2016 Oct - Current  
**UoM**  
Visiting Instructor  
Mentoring and evaluating project groups of Database Management Systems Module (CS3042)
- 2011 – 2012  
**Thineth Software Solutions**  
Java Developer  
Developed business solutions based on client requirements.

## TECHNICAL SKILLS



- Epic Code** 6<sup>th</sup> in Sri Lanka  
Global Algorithmic Challenge hosted in hackarrank
- Ideamart Code Ultimium** Winners  
Developed a location based social network
- IEEEXtreme 8.0** 22<sup>nd</sup> Local | 224<sup>th</sup> Global

## PROJECTS

Available in GitHub (linked)  
Academic

Award-winning projects  
Non-Academic  
Hyperlinked

### District Nutrition Monitoring System



Application to monitor nutrition status of children at district level. MOH doctors, sisters and midwives are the end users of this application. Currently implemented in 3 districts.

[Angular JS, HTML, CSS, ForerunnerDB, Java, Spring, Hibernate]

### Tracker Longitudinal Charts - DHIS2



GSoC project done with District Health Information Systems. This adds the capability of creating and viewing longitudinal charts of tracked entity instances of DHIS2 open source software.

[Java, Spring, Maven, Hibernate, Angular JS, HTML, CSS]

### Helium - Final Year Project



Reverse engineering image processing algorithms, optimize algorithms using DSLs, patch original binaries with optimized code.

[Halide, C++, Dynamorio]

### "Suraksha", open source disaster response platform



Platform is capable of managing disaster response centers, communicate their needs with public. People can use this platform to donate and help disaster response centers, lookup people in the disaster response centers by using facial recognition technologies.

[Java, MySQL, Spring, Hibernate, Angular JS, Computer Vision]

### "Seeds", the location based social network



Can be accessed by feature phones via SMS or USSD. User can plant a seed (~tweet) at a location and anyone who is within 5km can read those seeds. Users can water (~like) seeds planted by others. Seeds won't survive if not watered adequately.

[Dialog Ideamart APIs, PHP, MySQL, Linux]

### "Sense" The smart band which connects you



Sense is a WiFi enabled wearable hand band which is always connected to the user's facebook account. Matches people based on their likes, interests and recent activities.

[PHP, Android, Lua, Facebook API, ESP8266, NodeMCU, MySQL]

### SMS based automated live score board and SMS based treasure hunt for CSE Outboundz event.

A SMS based platform where game coordinators can update the scores of the competed teams instantly. These scores will be real-time updated in a live scoreboard and teams will be ranked accordingly. Parallel to this system, an application was developed to handle the treasure hunt of the outboundz event via SMS.

[Dialog Ideamart APIs, Angular JS, PHP, MySQL, CSS]

### "Gravitron Quest" a game which challenges the gravity



An android game where player have to use the concepts of gravity to move a spaceship without hitting the obstacles.

[Android, libGdx Engine, Java]

## REFERENCES

### Dr. Chandana Gamage Senior Lecturer

University of Moratuwa,  
Department of Computer Science & Engineering  
chandag@cse.mrt.ac.lk

### Dr. Roshan Hewapathirana (MBBS, MSc (IT), MIEEE) CEO,

Health Informatics Society of Sri Lanka 25,  
Norris Canal Road,  
Sri Lanka  
ceo@hissl.lk  
0772277705 | 0112689545

### BearCare



A web site which connects parents to clean and safe day cares. Day care owners can update their pages. Parents can find closest daycares by zip code. Service available only in USA.

[PHP, Laravel, MySQL, Angular JS]

### "Spandha", a wearable health device



A wearable health device which can be used to keep track of the health of elderly people. Device is capable of monitoring heartbeat and body temperature continuously. Detects if person falls and sends a SMS alert to a pre-saved mobile phone.

[Arduino, Java, MySQL, Ideamart APIs]

### CSE Partner Network



Contributed to the initial phase of the platform which was built to connect CSE department with the industry.

[jQuery, PHP, CSS, MySQL]

### Nigandu



A dictionary & herbs database for Sinhala Aurvedhic Medicine, where user can search the dictionary either in Sinhala unicode or phonetic.

[CSS3, Javascript, HTML, AJAX, JQuery, MySQL]

### Moradevans



Official web portal for moradevans community which includes a forum, a contacts book, member management, member profiles and image galleries.

[Angular JS, PHP, HTML5, CSS3, JQuery, Bootstrap]

### Nanosoft eTuition Manager



An android application for, 'E tuition manager' which is an off the shelf product developed by nanosoft solutions; coupled with a barcode reader to read the student identity cards and app brings most of the functionalities provided by the desktop application to the mobile device.

[Android, PHP, Java]

### Multi modal Self Driving Autonomous Car



The car has the ability to avoid the obstacles and travel on a road by detecting lanes. Three different algorithms are used for lane detection, that suites three different road conditions. (High ways, Noisy roads, Indoor roads).

[OpenCV, java, Rasberry Pi, node js, Arduino]

### Sales management System (Crown Biscuits)



Connects multiple locations of the company; factories and sales points. Support offline transactions and near real time transaction synchronization between all instances.

[Multi-master DB replication, SymmetricDS, Spring, Hibernate]

## AWARDS

- 2016  
**Dean's List**  
Semester 2,3 & 5  
Faculty of Engineering, University of Moratuwa.
- 2015  
**Recognition Award**  
Awards Ceremony, University of Moratuwa  
For non-academic achievements as an undergraduate
- 2008  
**Best all-round Student**  
Maliyadeva College
- 2005  
**Best Chess Player**  
Colors Awarding Ceremony  
Maliyadeva College
- 2005,2006  
**All island best chess player**  
1<sup>st</sup> board  
Awarded by chess federation of Sri Lanka