

# Portfolio

한동대학교 전산전자공학부

유홍근

# 한동 어플

## 교내 정보 제공 어플리케이션



개발기간 / 개발인원

2011.07-2011.09 / 2명

분야

모바일 프로그래밍

역할

교내 도서관, 도서 검색 기능 담당

플랫폼 / 개발언어 / 개발환경

안드로이드 / Java, JSP / Eclipse

한동대학교 교내 제반 사항 제공 어플인 “한동어  
플” 개발 중에서, 교내 도서관의 도서 검색 기능을  
웹에서 모바일로 옮기는 작업을 하였다. 모바일  
사용자로부터 질의를 받아서 도서관 홈페이지로  
검색하여 결과를 받아 화면에 구성하는 작업을 하  
였다.

Google Play :

<https://play.google.com/store/apps/details?id=ghost.android.ghosthguapp>

# Salad Toss Windows 8 App 퍼즐 게임



개발기간 / 개발인원

2012.03-2012.07 / 3명

분야

캐주얼 퍼즐 게임

역할

게임 로직 및 아이템 기능 구현

플랫폼 / 개발언어 / 개발환경

Windows 8 app / HTML,JS / VS 2012

중소 기업 게임 회사 인턴 재직 중(RocketOz / 현재 '선데이토즈'에 합병), HTML5를 이용한 멀티 플랫폼 대응 게임을 개발하였다. 특히 Windows 8 초기 App Store에 올릴 게임을 개발하였다. 정해진 시간 내에 같은 타입의 과일 4개를 수직, 수평으로 맞추면 터지고, 아이템을 이용하여 추가 점수를 따는 퍼즐 게임을 개발하였다.

# Penguin Almighty

Facebook App 슈팅 게임



개발기간 / 개발인원

2012.08-2012.12 / 4명

분야

캐주얼 슈팅 게임

역할

발사체(펭귄) 발사 및 안내선 기능 개발

플랫폼 / 개발언어 / 개발환경

Facebook App / HTML,JS / VS 2012

중소 기업 게임 회사 인턴 재직 중, 펭귄을 쏘아서  
괴물을 맞추는 슈팅 게임을 개발하였다.

ImpactJS라는 자바스크립트 엔진을 이용하여  
HTML5 캔버스 위에 돌아가는 게임을 개발하였  
으며, 특별히 펭귄이 날라가며 Bouncing하는 기  
능 및 미리 궤적을 보여주는 안내선 기능을 중점  
적으로 개발하였다.

Facebook App :

[https://apps.facebook.com/  
pinguinalmighty/?  
fb\\_source=bookmark&ref=bookmarks&  
count=0&fb\\_bmpo=0](https://apps.facebook.com/pinguinalmighty/?fb_source=bookmark&ref=bookmarks&count=0&fb_bmpo=0)

# 관련 자료 첨부



## 경력증명서

제 20130429 1 호

### Salad Toss Penguin Almighty

성명 유 흥 근 주민등록번호 [REDACTED]

주소 부산시 동래구 사직2동 630번지 [REDACTED]

위 사람은 로켓오즈(주)에서 아래 기간동안 재직하였습니다.

부서 개발팀 직무 소프트웨어 엔지니어 인턴  
기간 2012년 3월 2일부터 2013년 4월 26일까지

2013년 4월 29일

로켓오즈(주)

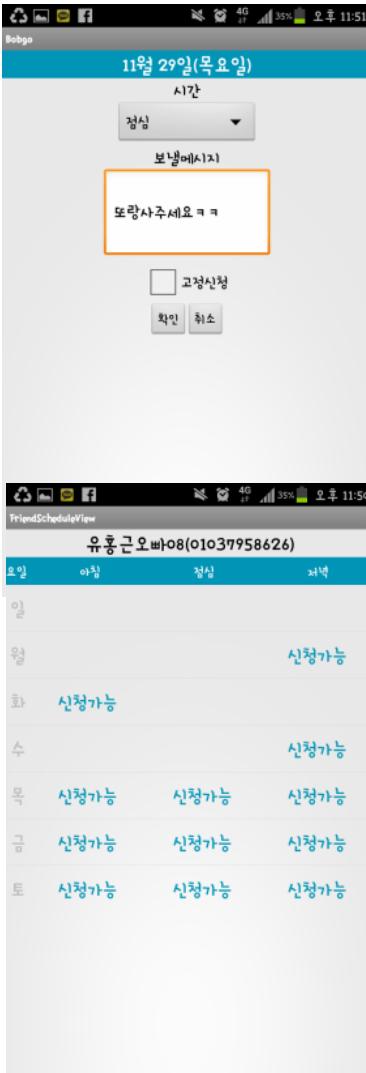
대표이사 임정민



로켓오즈(주) 사업자등록번호 128-86-47699  
서울시 강남구 논현로 175길 107번지 큐빅디자인빌딩 4층  
Tel: 070-4225-1109 email: [contact@rocketoz.com](mailto:contact@rocketoz.com)

# Handong Bobgo

## 교내 밥 약속 일정 관리 앱



개발기간 / 개발인원

2012.09-2012.11 / 4명

분야

모바일 프로그래밍

역할

약속 요청 및 알림(푸시) 기능 규현

플랫폼 / 개발언어 / 개발환경

안드로이드, 구글 앱엔진 / Java / Eclipse

교내 학생들을 위해 밥 약속을 편리하게 잡을 수 있게 어플을 통해 상대방에게 요청을 하고 요청에 따른 알림을 주고 약속이 성사되면 일정표에 표시 해주는 어플을 제작하였다. 구글 앱 엔진을 이용 하여 서버를 만들었고 구글 푸시 서비스(GCM)등을 사용하여 알림을 구현하였다.

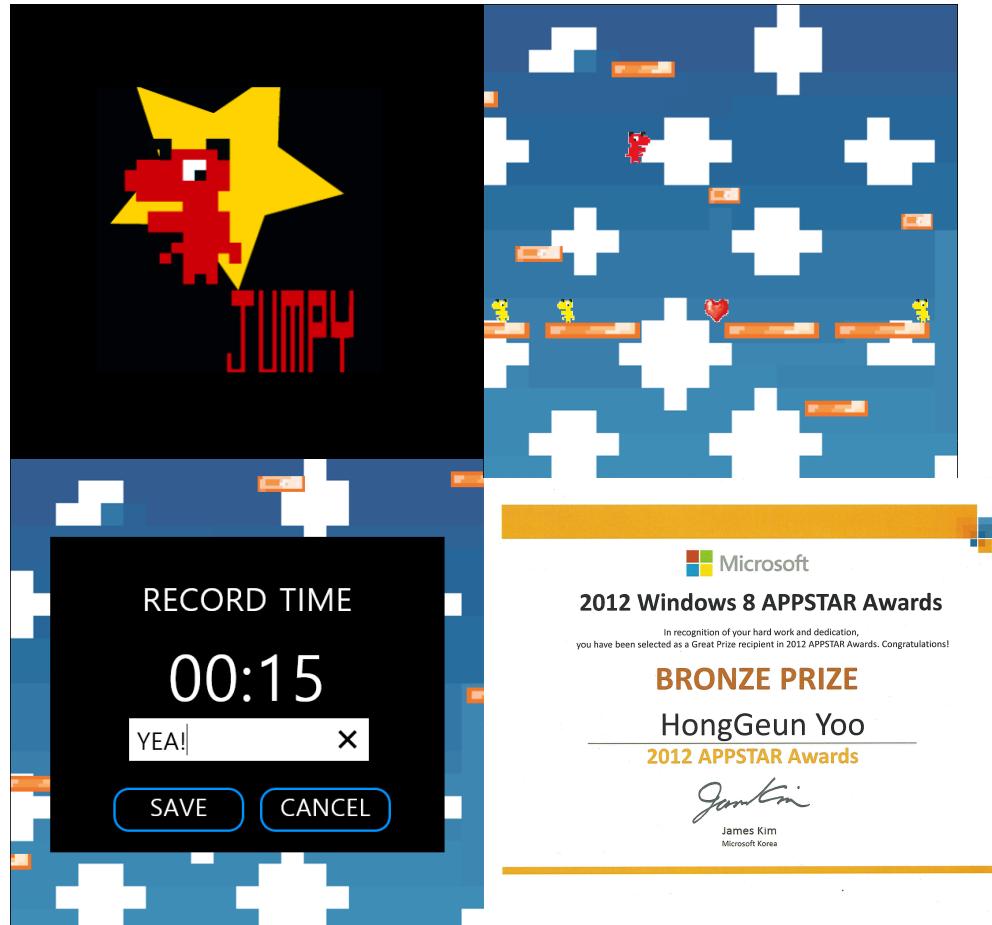
소스코드 :

<https://github.com/hongkunyoo/handong-bobgo>

# Zumpy

Windows 8 App 점핑 게임

2012 Windows App Star 수상작 – 동상



개발기간 / 개발인원

2012.10-2012.11 / 2명

분야

8비트 횡 스크롤 런 게임

역할

게임 코어 기능 구현

플랫폼 / 개발언어 / 개발환경

Windows 8 App / JS, HTML5 / VS 2012

2012년 Windows App Star 수상작으로, 주인공 Zumpy가 날라오는 블럭들을 위로 뛰어 다니면서 아이템을 먹고 점수를 획득하는 게임이다. 8비트의 복고풍 그래픽을 바탕으로 간단한 조작과 시원한 조작감으로 중독성이 강한 게임이다.

Play: <http://hongkunyoo.github.io/zumpy>

소스코드 :

<https://github.com/hongkunyoo/zumpy>

# 관련 자료 첨부 - zumpy



## 2012 Windows 8 APPSTAR Awards

In recognition of your hard work and dedication,  
you have been selected as a Great Prize recipient in 2012 APPSTAR Awards. Congratulations!

**BRONZE PRIZE**

HongGeun Yoo

**2012 APPSTAR Awards**

A handwritten signature in black ink that appears to read "James Kim".

James Kim  
Microsoft Korea

# BOM Project

## 아프리카 해외 IT 봉사 활동

Daeyang Luke Hospital



Ophthalmic Dept.

Patients Report

Dates : From (2013-10-11) To (2013-12-11)

No.	Patient ID	Name	Sex	Age	Diagnosis	Prescription	Examiner	Examine Date
001	LGGGLT	Super User	M	58	Cataract	Cataract surgery,Optanac_5ml	Super User	2013-11-25 15:33:29
002	KUCTN4	Clement Saphika	M	44	Viral,asjadikjaosdfjoiasdfasdf	Cataract surgery,Pred-forte_5ml,Optanac_5ml	Super User	2013-11-28 11:04:59
003	JUVG2G	Adolf Joshua	M	17	PCO	Refer to KCH for Yag Laser,Gutt Dexamethasone	Super User	2013-11-28 11:36:55
004	KUCTN4	Clement Saphika	M	44	Refractive Error	Needs correction at KCH	Super User	2013-11-28 14:19:27
005	LN4UFY	Eluby Sagawa	F	62	Aphakia	Advice,Atropine and Dexamethasone	Super User	2013-11-28 15:26:22
006	HFHCYG	Lotus Madise	M	64	Symblepharon,Conjunctivitis Bacteria	Symblepharon release later,Systane,Tetracycline	Super User	2013-12-03 09:02:03
007	HF641J	Henry Katumba	M	64	Allergic Cataract	Pred-forte_5ml	Super User	2013-12-03 09:26:11

Back
Export
Finish

Chart No. 1  
Patient ID LAXND0  
Date 2013-12-11  
Name Super User  
Age 56(1957-07-01)  
Sex M

Previous Record 1 2013-12-11

Auto Refractor SPH CYL AX  
OD: OS:  
Keratometer (R) D1 D2 AX  
R1 R2 AVG 0.0 0.0 0.0  
CYL  
I(L) D1 D2 AX  
R1 R2 AVG 0.0 0.0 0.0  
CYL

Glass Information  
VSC Worn Glass VCC  
OD X Ax X Ax OS X Ax X Ax  
Glass Needed ADD:

Glass Far	Near
DM	Allergy
HBP	Trachoma
PD	Dry Eye
Etc.	Trauma

Procedure Trabeculectomy

Chief Complaints  
OD: Lid Conj F P  
OS: Lid Conj F P

Operation History  
Cornea A.C.  
Lens  
Fundus  
Medication  
Protogest 20mg, Vexel 1%

Past History  
Glasses: L R  
Doctor's Note

개발기간 / 개발인원

2013.07-2013.12 / 2명

분야

병원 전산 시스템

역할

안과 전자 차트 개발

플랫폼 / 개발언어 / 개발환경

Ubuntu / Ruby on Rails, JS / NetBeans

연세 세브란스 병원 산하 프로젝트

BOM(Blindness Zero Movement)에 참여하게 되었다. 아프리카 최빈국 말라위에서 Baobab이라는 NGO 단체와 함께 병원 전자 차트 개발에 참여하였다. OpenMRS를 이용하여 안과 전자 차트를 중점적으로 개발하였다.

홈페이지 : <http://project-bom.org/>

# 관련 자료 첨부

OPEN ACCESS Freely available online

Health in Action

PLOS MEDICINE

## Using Touchscreen Electronic Medical Record Systems to Support and Monitor National Scale-Up of Antiretroviral Therapy in Malawi

Gerald P. Douglas<sup>1,2\*</sup>, Oliver J. Gadabu<sup>1</sup>, Sabine Joukes<sup>1</sup>, Soyapi Mumba<sup>1</sup>, Michael V. McKay<sup>1</sup>, Anne Ben-Smith<sup>3</sup>, Andreas Jahn<sup>4,5</sup>, Erik J. Schouten<sup>4,6</sup>, Zach Landis Lewis<sup>2</sup>, Joep J. van Oosterhout<sup>7</sup>, Theresa J. Allain<sup>7</sup>, Rony Zachariah<sup>8</sup>, Selma D. Berger<sup>9</sup>, Anthony D. Harries<sup>9,10</sup>, Frank Chimbwandira<sup>4</sup>

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### Background

The scale-up of antiretroviral therapy (ART) in sub-Saharan Africa is unprecedented. Effective monitoring and evaluation (M&E) systems are essential to track patient access to and retention on ART; to encourage feedback to improve clinic-based care; and to ensure rational drug forecasting and timely procurement to prevent drug stock-outs [1]. Complete and accurate data are a fundamental prerequisite for any M&E system.

Standardized tools for ART data collection were in use in all 297 public and private sector ART sites in Malawi by December 2009. Most sites use a paper-based system, consisting of treatment cards for each patient and one ART patient register per clinic. Their use in case-finding and treatment follow-up have been described previously [2]. Every quarter, ART clinic personnel perform a standardized patient cohort analysis that includes aggregation of case-finding details of patients registered during the previous quarter and since ART was first begun, as well as treatment outcomes for the cumulative cohort. The latter analysis requires a review of all treatment cards in order to update the clinic register and then a tally-score on current patient outcomes. "Primary outcomes" include alive on ART, died, stopped ART, transferred to another ART clinic, and lost to follow-up. Secondary outcomes for patients alive on ART include ART regimen, drug adherence, ART side

### Summary Points

- Complete, accurate, and timely data are critical for providing high quality patient care, programmatic monitoring and evaluation of antiretroviral therapy scale-up, continuity of care for chronic illness, and rational drug forecasting
- Manual paper-based aggregation of data and compilation of reports become unfeasible as patient cohorts on treatment and data increase
- A point-of-care (POC) electronic medical record (EMR) system combines healthcare delivery and data collection processes into one activity, with the added bonus of providing enhanced decision support to clinicians during the patient encounter
- Challenges associated with operating computers in a resource-constrained setting are many, but have been rigorously addressed during the scale-up of POC EMR to monitor and support ART scale-up in Malawi
- The experience gained and infrastructure built through successful deployment of the ART EMR will facilitate its adaptation and use for other chronic diseases (e.g., tuberculosis, diabetes mellitus, and hypertension), preparing a foundation for a comprehensive electronic health record system

efforts, and current tuberculosis status. A rolling "cohort survival analysis" is also performed by counting primary outcomes of patients who registered during specified previous quarters [2].

By December 2009, 46 ART clinics in Malawi had each registered >2,000 patients and 11 of these had registered >5,000 patients [3]. At most of these

high-burden clinics, nurses and medical record clerks can take up to 5 days to prepare the quarterly cohort report, sometimes closing the clinic in order to complete this task. While the quality of the quarterly case-finding data is usually good, the completeness and accuracy of primary outcome data are often compromised, and secondary outcome analyses

**Citation:** Douglas GP, Gadabu OJ, Joukes S, Mumba S, McKay MV, et al. (2010) Using Touchscreen Electronic Medical Record Systems to Support and Monitor National Scale-Up of Antiretroviral Therapy in Malawi. PLoS Med 7(8): e1000319. doi:10.1371/journal.pmed.1000319

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**Funding:** We thank the Centers for Disease Control (CDC) and Prevention, Global AIDS Program, an anonymous donor, and the Open Society Initiative for Southern Africa (OSISA) for supporting the development and scale-up of the ART EMR in Malawi. The funders played no role in the decision to submit the article or in its preparation.

**Competing Interests:** The authors have declared that no competing interests exist.

\* E-mail: gdouglas@baobabhealth.org

**Provenance:** Not commissioned; externally peer reviewed.



DAEYANG LUKE HOSPITAL

P.O. BOX 30330  
LILONGWE3, MALAWI  
Tel: 01 711 398

10/12/2013

### TO WHOM THIS MAY CONCERN

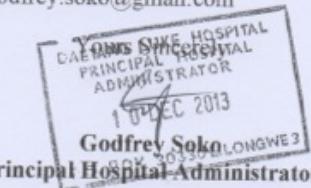
This is to confirm that Mr. Hong Kun Yoo worked with Daeyang Luke Mission Hospital in Malawi as a short term volunteer from 02<sup>nd</sup> July to 12<sup>th</sup> December 2013 as a Systems Manager. He was faithfully starting work at 7:30am to 5:00pm from Monday to Saturdays and sometimes on Sundays.

During his stay Mr. Yoo helped a lot in developing a computerized package for the hospital registration and billing system for both the Out Patient and In Patient Departments of the hospital. The system will greatly help the hospital to enhance revenue collection and get up to date statistics for decision making. Besides assisting the hospital, Mr. Yoo also assisted upgrading the hospital computer server.

He is a humble, dedicated and honest youngman who is able to listen and very willing to share ideas with colleagues.

The hospital has learned a lot from him and will greatly miss his services.

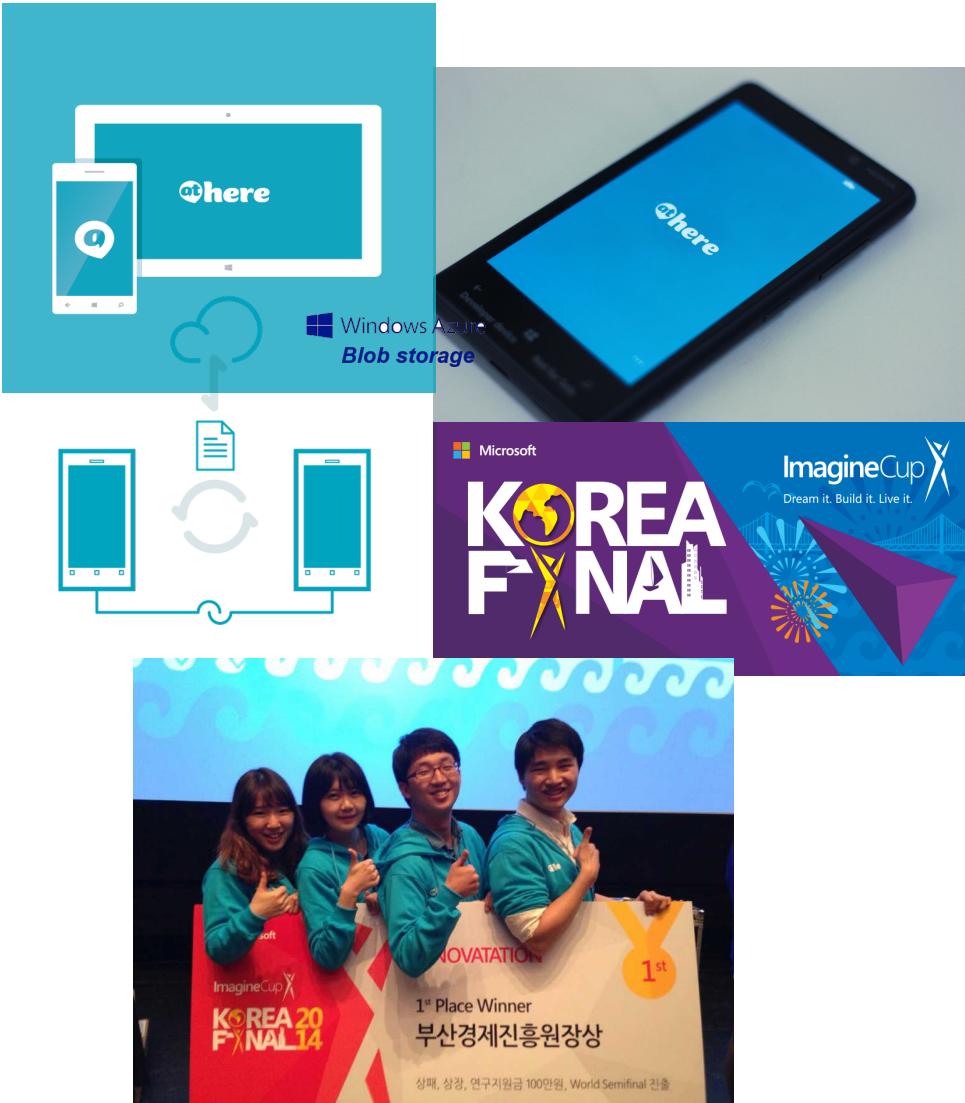
For more information please do not hesitate to contact the undersigned on the above address or email: godfrey.soko@gmail.com



Godfrey Soko  
Principal Hospital Administrator

# At Here

## 무 계정 파일 공유 어플



2014 Microsoft Imagine Cup 수상작  
- 국내 대상, World Semi Final

개발기간 / 개발인원

2014.01-2014.06 / 4명

분야

모바일 프로그래밍

역할

파일 전송 및 공유 기능

플랫폼 / 개발언어 / 개발환경

Windows Phone App / C# / VS 2013

2014 Imagine Cup Innovation 분야 수상작으로, 주변에 있는 사람들과 계정을 알지 못하더라도 파일 공유를 할 수 있는 시스템을 개발하였다. 그 원리로는 사용자의 위치 정보를 이용하여 주변의 사람들과 정보를 공유할 수 있게 만들었다. 이를 통하여 학생 과제 모임, 회의 시 바로 그 자리에서 정보를 공유할 수 있게 하였다.

팀 정보 :

<https://www.imaginecup.com/Team/Index/38222>

관련 기사 : <http://news.imaso.co.kr/39621>

소스코드 :

[https://github.com/hongkunyoo/pin\\_the\\_cloud](https://github.com/hongkunyoo/pin_the_cloud)

# 관련 자료 첨부

제 1 호

## 상 장

유 흥 근

귀하는 한국마이크로소프트에서 주최하는  
2014 이매진컵 한국대표 선발전에서 우수한  
성적으로 입상하였기에 이 상장을 수여합니다.

2014년 3월 28일

부산경제진흥원장 차재주



## Innovation Competition

2014 World Semifinalist

This Certificate is Presented To:

hongkun yoo

Pin the Cloud

Congratulations and thank you for your hard work and dedication as a competitor in Imagine Cup 2014. You are now part of an elite international community of students who have shown remarkable creativity and innovation to push technology forward.

John Scott Tynes  
Imagine Cup Program Lead  
Microsoft Corporation