### PSYCLOUD: SCIENTIFIC COMPUTING IN THE CLOUD

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# SUBMITTED TO THE FACULTY OF THE GRADUATE SCHOOL UNIVERSITY OF THE PHILIPPINES LOS BANOS IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY (BY RESEARCH) (Computer Science)

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The thesis attached hereto, entitled "PSYCLOUD: SCIENTIFIC COMPUTING ON THE CLOUD" prepared and submitted by JOSEPH ANTHONY CARABALLE HERMOCILLA in partial fulfillment of the requirements for the degree of DOCTOR OF PHILOSOPHY BY RESEARCH (COMPUTER SCIENCE) is hereby accepted.

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### **BIOGRAPHICAL SKETCH**

The author was born on July 10, 1980 at barangay Malansad Nuevo, Libmanan Camarines Sur. He is the eldest son of Guido V. Hermocilla and Jovina V. Caraballe. During his childhood years, his friends and classmates called him Jo-An. In high school, he is known as Herms. Today, he known to his students as Sir JACH. He still prefers to be called by his first name, Joseph.

Joseph started elementary school at the Malansad Nuevo Elementary School where he studied until Grade 3. He then transferred to Naga Parochial School in Naga City where he completed his elementary education. He spent his high school years at the Jesuit-managed school, Ateneo de Naga University. He was admitted to the BS Forest Products Engineering curriculum at the University of the Philippines Los Banos in 1996. He transferred to BS Computer Science in 1998 and completed the degree in 2002.

At present, he is teaching at the Institute of Computer Science, College of Arts and Sciences, in UP Los Banos. Aside from teaching, he is also doing research in various fields of computer science, specifically in computer networks and distributed systems. His mission in life is to serve others and make them happy using the talents and gifts given to him by God.

JOSEPH ANTHONY CARABALLE HERMOCILLA

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# ABSTRACT

HERMOCILLA, JOSEPH ANTHONY C., University of the Philippines Los Banos,

April 2016. PsyCloud: Scientific Computing in the Cloud

Major Professor: DR. ELIEZER A. ALBACEA

Scientific Computing...

# INTRODUCTION

	Background of the Study
Some texts here	
	Statement of the Problem
Some texts here	
	Significance of the Study
Some texts here	
	Objectives of the Study
General objective. The spe	ecific objectives are the following:
1. Objective 1;	
2. Objective 2;	
3. Objective 3;	
4. Objective 4.	

# REVIEW OF RELATED LITERATURE

This is the review of related literature (Garey, 1979)		
Su	ab Section 1	
Sub Sub Section 1		
Some texts here		
Me	etaheuristics	
Sub Sub Section 1		
Some texts here		
Sub Sub Section 2		
Some texts here		

# THEORETICAL FRAMEWORK

	Subsection 1
Some texts here	
	Subsection 2
Some texts here	

### **METHODOLOGY**

### Subsection

Some texts here...

```
CMSC 1,YZ,80,5-6,TTh,ICS LH1,TBA,TBA
CMSC 1,YZ-1L,15,10-1,Mon,ICS PC Lab 1,TBA,TBA
CMSC 1,YZ-2L,15,10-1,Tues,ICS PC Lab 1,TBA,TBA
CMSC 1,YZ-3L,15,10-1,Wed,ICS PC Lab 1,TBA,TBA
CMSC 1,YZ-4L,15,10-1,Thurs,ICS PC Lab 1,TBA,TBA
CMSC 1,YZ-5L,20,1-4,Thurs,ICS PC Lab 4,TBA,TBA
CMSC 100,C,80,9-10,MW,ICS LH3,TBA,TBA
CMSC 100,C-1L,20,1-4,Mon,ICS PC Lab 6,TBA,TBA
CMSC 100,C-2L,20,1-4,Tues,ICS PC Lab 6,TBA,TBA
CMSC 100,C-3L,20,1-4,Wed,ICS PC Lab 6,TBA,TBA
CMSC 100,C-4L,20,1-4,Wed,ICS PC Lab 6,TBA,TBA
```

Figure 1. Sample class offering data

The student priority is described below.

Table 1. Priority ordering

PRIORITY	DESCRIPTION
1	New Student (no record of any grade)
2	Graduating (24 units or less to earn in curriculum)
3	New Student (no record of any grade)
4	Failed (0-50%] of units last sem (status code 2 or 3)
5	Failed (50%,75%] of units, or on LOA last sem
6	Failed (75%-100%] of units last sem (status code 5 or 6)

### RESULTS AND DISCUSSION

Some texts here...

Table 2.Statistics for solutions generated by the algorithms using 2<sup>nd</sup> Sem 2004.

ALGO	WRITE -IN	NO WRITE -IN	APL	NSF L	NSU	NSO	NSZ L	APCS	GTE15	LT15
REGIST	8603	362	88.18	3540	4089	908	66	72.91	6008	2595
IA	8603	0	86.66	3364	5193	0	46	71.20	6008	2595
IAMBM	8603	0	87.57	3533	4986	33	51	71.80	6164	2439

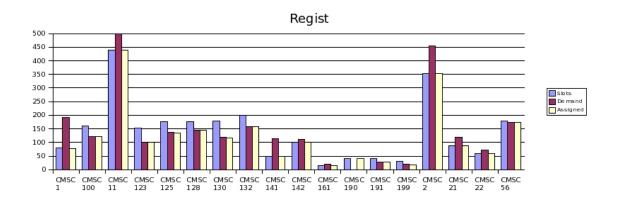


Figure 2. Available slots, demand, and assigned slots for CMSC subjects using REGIST

# SUMMARY AND CONCLUSION

Some texts here...

# RECOMMENDATIONS

Some texts here...

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