ANIRBAN BANERJEE

Room 529, 1005 College Court, Urbana IL 61801 • 217-979-0593 • banerj10@illinois.edu
www.linkedin.com/in/banerj10 • https://github.com/banerj10

EDUCATION

University of Illinois **Urbana-Champaign, IL**
Bachelor of Science in Computer Engineering, Minor in Business *May 2018*
James Scholar, Dean's List Spring 2015 *G.P.A.: 3.45/4.00*

Relevant Coursework:

ECE 391	Computer Systems Engineering	CS 374	Algorithms and Models of Computation
CS 225	Data Structures and Algorithms	ECE 408	Applied Parallel Programming
ECE 422	Computer Security	ECE 428	Distributed Systems
CS 498	Virtual Reality	CS 418	Interactive Computer Graphics
ACCY 200	Fundamentals of Accounting	FIN 221	Corporate Finance
BADM 300	Legal Environment of Business	BADM 320	Principles of Marketing
BADM 380	International Business		

SKILLS

- **Programming Languages:** Proficient with C, C++, Python 2 and 3, familiar with Java, C#, SQL
- **Applications:** Familiar with OpenGL, MATLAB, Unity 3D, Tkinter
- **Operating Systems:** Proficient with Windows and Linux/Unix environments
- **Languages:** English (Fluent), Hindi, Bengali (Native)

EXPERIENCE

Project Intern at Oracle Financial Services Software (OFSS) **June – July 2017**

- Installed and configured Oracle's Goldengate data integration and replication framework on an Oracle Windows VM server to allow it to replicate data between two schemas within an Oracle database
- Implemented a new feature to Oracle's Flexcube banking software suite based on a functional specification change request made by Wells Fargo bank as part of a team
- Wrote and modified SQL scripts, created generators for XML files, and studied existing internal documentation to locate, record and correct inaccuracies and errors

PROJECT WORK

Personal Project – Python Calculator **May 2017**

- Built a self-contained, cross-platform GUI calculator capable of evaluating basic arithmetic operations that can be run on both Windows and Linux
- Coded in Python using the Tkinter graphical user interface package

Distributed Systems - Chat Application, Key-Value Storage, Transaction Protocol **Jan – May 2017**

- Designed, implemented, tested and documented three scalable distributed systems: a decentralized, total-ordered chat application, a failure-resistant key-value storage and lookup, and a protocol for carrying out concurrent distributed transactions which adhered to ACID (Atomicity, Consistency, Isolation, Durability) properties
- Implemented in Python and executed on ten homogeneous Linux virtual machines which acted as the distributed 'nodes'

Linux Kernel Design/Implementation **Oct – Dec 2016**

- Collaborated in a team of four to build a basic Linux-styled operating system from scratch
- Project scope included implementing interrupt setup and handling, keyboard, terminal and RTC drivers, screen scrolling, paging, file system support, process handling and switching, system calls, round-robin scheduling, and multiple-terminal capability among other features
- Coded primarily in C, with x86 assembly used to implement some parts

Virtual Reality Gaming – Flight Simulator and Escape Room **Oct – Dec 2016**

- Conceptualized and created a flight simulator and an escape room game to be played on the Oculus Rift VR headset with an Xbox controller
- Entailed the design and implementation of game mechanics, graphics, sound effects/background music, user interface, and controller support as well as creating a trailer showcasing the escape room game
- Both games created on the Unity 3D game development platform with gameplay scripting in C#

Arcade-Style Shooter Game **Mar - May 2016**

- Created a simple arcade-style vertical-scrolling 2D space shooter game
- Implemented primarily in hardware on the Altera DE2-115 FPGA board using System Verilog, with some functionality implemented in software in C using the NIOS-II processor