

ROHAN MATHUR

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EDUCATION

University of Illinois at Urbana-Champaign

Expected graduation May 2018

B.Eng., Computer Engineering, Minor in Mathematics

Emphasis on embedded systems and backend web platforms with strong interests in OS Architecture & Design. Selected upper division coursework includes Computer Systems Engineering, Artificial Intelligence, Data Structures, and Analog/Digital Signal Processing.

EXPERIENCE

Microsoft (Future)

Seattle, WA

Software Engineering Intern

May 2017 to August 2017

- Working on the Windows Devices Group team on lower-level aspects of the Windows Operating System.

Airware

San Francisco, CA

Software Engineering Intern

May 2016 to Present

Worked across the stack of the Airware drone solution (Go/Java/C/Python) to increase the ease-of-use of the platform.

- Improved embedded application connectivity with the Cloud backend.
- Implemented features such as autogenerated flight plans and prototyping the future of Airware Ground Control.

Rithmio

Champaign, IL

Software Engineering Intern

August 2015 to January 2016

Responsible for the development of an Android application prototype demonstrating Rithmio's award-winning gesture recognition machine-learning centric SDK when applied to the physical therapy context.

- Multi-faceted application featuring bluetooth accessory connectivity, informational performance graphs, local data persistence, material design elements, and more.

Wyng (formerly Offerpop)

New York City, New York

Software Engineering Intern through the hackNY Fellowship

May 2015 to August 2015

Created a new Flask-based web backend microservice that enabled the company's new platform to operate more efficiently. Enhanced the current platform's Django stack improving reliability and monitoring throughout.

- Rapidly learned/worked with Python, Django, Flask, Backbone.js, React, and many other technologies.
- Built REST APIs, custom HTTP authentication processes, and database functionality into a Flask microservice.

PROJECTS

AOKP (Custom Android Open Source OS)

<http://aokp.co>

Lead Developer

July 2011 to June 2015

Enhanced open source firmware distribution for smartphones and tablets based on the Android OS. Offers features and options not found in the official firmware distributed by vendors of these devices, including enhanced multimedia support, revised user interfaces/experiences, native theming support, and more.

- Led open-source project to boast over 11 million users around the world.
- Worked on vendor-distributed Linux kernel drivers and proprietary blobs to enhance device performance/features.
- Planned, executed, and code-reviewed several user interface features that headlined on Engadget, The Verge.

gyaradOS

<https://github.com/mathur/gyaradOS> (private)

A minimalist, modern monolithic operating system featuring virtualized memory (segmentation and paging), ext2fs filesystem support, keyboard/mouse/RTC/PIT/sound drivers, ELF-formatted user program execution, multiple shells, round-robin scheduling, dynamically allocated memory, and more.

POSITIONS & ACTIVITIES

ECE 391 - Computer Systems Engineering – *Teaching Assistant*

Fall 2016 to Present

CS 196 - Honors Freshman Intro to CS – *Teaching Assistant*

Fall 2015 to Present

IEEE UIUC Chapter – *Technical Vice President*

August 2015 to Present

ACM@UIUC SIGMobile – *Co-Chair*

January 2015 to May 2016

HackIllinois 2016 – *Hardware Director*

August 2015 to May 2016

ReflectionsProjections Conference – *Systems Team*

August 2014 to May 2016