

# MING TAI HA

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Website: <https://www.mingtaiha.com/> — Github: <https://github.com/mingtaiha>

## EDUCATION

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**Rutgers University — School of Engineering - New Brunswick, NJ** 09/2015 - Present  
*Masters of Science in Computer Engineering, Thesis Option*  
Overall GPA: 3.88

**Rutgers University — School of Engineering - New Brunswick, NJ** 09/2010 - 05/2014  
*Bachelors of Science in Material Science & Engineering — Double major in Mathematics*  
Overall GPA: 3.80, Summa Cum Laude

## PROJECTS

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**Nutritional AI** 03/2017 - 05/2017  
<https://github.com/mingtaiha/n.ai>

- Developed a suite of composable Slackbots to recommend recipes, purchase ingredients, and plan routes
- Integrated API.ai with Slackbots to enable natural language conversation
- Developed a custom machine learning algorithm to account for variety in recipe recommended to users
- Implemented a Flask application that exposed endpoints for our services to interact with the recipes database

**OS Projects - CS518** 02/2016 - 04/2016  
[https://github.com/mingtaiha/cs518\\_os\\_projects](https://github.com/mingtaiha/cs518_os_projects)

- Implemented basic functionality of pthreads and malloc (dlmalloc) in C
- Developed scheduler using a multi-level priority queue to schedule threads created the above pthreads library
- Developed memory manager to virtualize memory allocated to threads using the above malloc library

**HealthAnalytics** 09/2015 - 12/2015  
<https://github.com/mingtaiha/HealthAnalytics>

- Simulated state-level health statistics using Monte-Carlo methods and CDC/NIH studies with better accuracy than recorded by US Census data
- Created model to predict Cholesterol Levels, Blood Pressure, and Heart Rate of users (75% accurate within one STDEV)
- Managed development and integration of backend components
- Created a 100+ page Product Requirements Document

## WORK EXPERIENCE

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**Open Systems Solutions** 07/2017 - Present  
*Student Systems Programmer*

- Design and deploy a URL shortener with team using Flask, MySQL, Git/Phabricator for the Rutgers Community
- Create and deploy Docker containers to host Wordpress on NGINX for Rutgers faculty and staff
- Collaborate with team to build RPM packages and open source software used by 70k faculty & students
- Diagnose and resolve system/application on \*NIX servers in the Koji build environment, provisioned by Salt
- Write and maintain scripts to automate system administration tasks on \*NIX servers

## RESEARCH EXPERIENCE

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**RADICAL Lab - Rutgers University** 07/2015 - Present  
*Graduate Researcher*

- Developed a model to estimate task execution times on unknown resources
- Developed a method which enables users to select resources (HPC, HTC, Cloud) over which to distribute a workload
- Extended AIMES middleware to support execution on OSG
- Incorporated pilot job functionalities to RNA-sequencing tool to support scalable execution on HPCs & Clouds

## SKILLS & INTERESTS

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|------------------|---|
| <b>Skills</b>    | Python, C/C++, JavaScript, HTML/CSS, Bash, Docker, Git, Phabricator, MongoDB, MySQL |
| <b>Interests</b> | Cooking, Music, Traveling, Civilization V   |