Matthew Salim

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Education

Carnegie Mellon University

B.S. Computer Science, May 2018 B.S. Psychology, May 2018 GPA: 3.95 Dean's List, High Honors

Skills

Code

C, Python, SML, C#, Java HTML, CSS, XAML, SQL JavaScript, x86-64 Assembly

Platforms

UNIX Shell: bash, gdb Windows: UWP, Pen, IoT HoloLens, Android, Raspberry Pi

Courses

Computer Systems Parallel Algorithms **Functional Programming** Theoretical Computer Science Matrix Theory Prosocial Behavior

Life

You're Awesome Campaign

- · Craft solutions to empower students to do awesome things
- · Post, chalk, draw, and fencepaint encouraging messages
- · Start movement in encouraging others to practice gratitude

Food Drives

· Donated 1,000+ lbs. and saved \$1,300 worth of food

Experience

Back-End Engineer CMU Robotutor

Feb 2016 - Present

Supporting underprivileged children in independent learning Created Automated Kiswahili Multiple Choice Question Generator

· Generated choices by extracting, parsing, and analyzing 140,000+ Kiswahili words as word root and part of speech in Java and SQL

Generated common core data to be utilized across other features.

- · Built story image, text, and metadata extractor in Java and Python
- · Synthesized story data into one framework-readable JSON file

Teaching Assistant CMU Computer Science May 2016 - Present Fall 2016: Assisting 550+ students in 15-213: Computer Systems

Summer 2016: Assisted 400+ students in 15-213, 15-122, and 15-112 · Regulated grading process and assisted faculty with logistics

- · Processed 40% of online questions amongst 8 instructors
- · Led initiatives supporting student wellbeing, such as KitKat TA Hours

Course Developer Professor Randal E. Bryant

Summer 2016

Reengineered the C Memory Allocator Lab

- · Designed new C starter code for future course iterations
- · Resolved a 15-year-old bug in existing implementation
- · Debugged grading script on false positives

Research Assistant CMU Relationships Lab May 2016 - Present

- · Code couple discussions on 30+ interaction criteria, including open communication, confidence in partner, and responsiveness
- Explore technology integration to improve research efficiency, such as OCR for future paper-based components

Selected Projects

Plan BrickHack 2, continued development Mar 2016 - Present C#, XAML | APIs: Cortana, Surface Pen, UWP | Front-end, UI/UX

- · Crafted paper-like digital calendar by integrating digital pen
- · Enabled natural language voice commands with Cortana

STEMLabs HackMIT 2016 Top 10 Hack, team of 4

Sep 2016

C# | HoloLens, Unity | Back-end

- · Visualized depth-first-search algorithm in 3D on the HoloLens
- · Written UWP library for textbook optical character recognition