

# SAMUEL KEYS



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## Summary

Computer engineering student with interest in both software and hardware development. Looking to grow network, find a career, and to further develop skills/self. Friendly, responsible, adaptive learner. Open to new experiences.

## Education

Projected: May 2020	University of Kentucky, <i>Lexington, KY</i> Bachelor of Science in <b>Computer Engineering</b> , Minors in <b>Computer Science &amp; Mathematics</b>	<b>GPA: 3.96</b>
Jun. 2016	Eastern High School, <i>Louisville, KY</i>	<b>GPA: 3.98</b> <b>4.21</b> <sub>(weighted)</sub>

## Work Experience

Jan. 2019 – May 2019	Startup Internship, <b><i>FlyWire</i></b> , <i>Lexington, KY</i> Worked with a startup using GPS and camera technology to improve fishing sustainability. Involved with incorporating the company's data and workflow with cloud services (AWS). Worked with machine learning (OpenEM / CVision) to improve data analysis efficiency.
May 2018 – Aug. 2018	Nuclear Internship, <b><i>Duke Energy</i></b> , <i>Charlotte, NC</i> Interned in the Fleet Digital Process Systems / Cyber Security department of McGuire Nuclear Station. Work included research / testing of network security software / appliances, maintenance of development lab, and miscellaneous tasks.
Aug. 2017 – May 2018	Peer Mentor, <b><i>University of Kentucky</i></b> , <i>Lexington, KY</i> Worked for the Engineering Living Learning Program (LLP) dormitory as a peer mentor for incoming wildcats. Actively lead a group of 35 freshmen, planned events, mentored students, and communicated effectively with coworkers and superiors.
Mar. 2016	IT Intern Finalist, <b><i>Strategic Communications</i></b> , <i>Louisville, KY</i> Competed as a team of 4 for an internship with Strategic Communications ( <a href="http://yourstrategic.com/">http://yourstrategic.com/</a> ). Designed and implemented a virtualization solution that stored the company's operating systems from a central network attached storage (NAS) server and hosted VMs using Xencenter to be accessed by the company's computers. One member from the winning team worked as an intern for the company. My team won and a friend worked.
Mar. 2013 – Aug. 2016	Newsletter Deliverer, <b><i>Owl Creek Community</i></b> , <i>Middletown, KY</i> My brother and I delivered newsletters in a neighborhood one night each month. There were over 600 houses to deliver to.

## Skills

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Software Dev.	C, C++, C#, Java, Python, Assembly, UNIX / Linux, Web Dev. (HTML, XML, CSS), virtualization (XenServer, VMware), Machine learning (CVision, TensorFlow), Amazon web services (AWS), MatLab, Unity
Hardware Dev.	VLSI IC Design, Icarus/Xilinx Verilog, MultiSim, PCB Design (Eagle), microcontrollers (Arduino, TI Launchpad, Raspberry Pi), FPGAs
Soft Skills	Organized, driven work ethic, constructive team-worker, good mediator, professional communication, positive attitude
Misc.	Creative prototyping (CAD, 3D printing, CNC, woodworking), excellent with Microsoft Office suite, Information Tech., Computer networking, Photoshop, quick to learn new skills

## Extra-Curricular

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<u>Organization Name</u>	<u>Position</u>	<u>Summary</u>
UK Entrepreneur Club (E-Club)	Marketing Chair	Promotes entrepreneurship, idea incubation, and business start-ups among UK students. Involved May 2019 – present.
UK TBP Chapter (Tau Beta Pi)	Initiation Chair	Engineering honor society. Volunteers at and around UK campus. Involved Fall 2018 – present.
UK HKN Chapter (Eta Kappa Nu)	Member	Computer Engineering honor society.
UK IEEE Chapter (Institute of Electrical and Electronics Engineers)	Treasurer, Hardware team leader	Hosts industry/student workshops and talks. Hardware team designs a robot to compete in IEEE Southeast Conference annually. Involved Fall 2018 – present.
UK RCC (Rock Climbing Club)	President	Athletic club for rock climbers at UK. Involved Fall 2017 - present.
Eastern Bowling Team	Varsity	Joined senior year. Small team. Competed often. Involved Fall 2015 – Spring 2016.
Eastern Track Team	JV	Shorter distance running. Usually competed in 800m, 1600m, and mile races. Involved Spring 2015, Spring 2016.
Eastern Cross-country Team	JV	Competed often. Usually competed in 5k races. Involved Fall 2013, Fall 2014, Fall 2015.
Champions Gymnastics	Lvl. 6	A gymnastics gym in Louisville, KY. Active 2010 – 2014.

## UK Undergraduate Coursework

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<u>Semester</u>	<u>Courses</u>
Fall 2016	Engineering fundamentals (EGR 101/102), Calculus I, Physics 1, Physics 1 lab, English composition & communication
Spring 2017	Engineering fundamentals (EGR 103), Calculus III, Physics 2, Physics 2 lab, Circuits 1, Program design
Fall 2017	Calculus IV, Circuits 2, Circuits 2 lab, Digital logic, Software engineering techniques, Chemistry 1
Spring 2018	Discrete mathematics, Matrix algebra, Embedded systems, Computer architecture
Fall 2018	Numerical methods, Statistics for engineers, Algorithm design / analysis, Systems programming, Advanced computer architecture
Spring 2019	Systems and signals, electronics, Artificial intelligence (AI), Very Large Scale Integration (VLSI)
Fall 2019	Senior design / capstone, Machine learning, Parallel processing (Graphics processing units and multi-core processors), Engineering entrepreneurship
Spring 2020	Senior design / capstone, Advanced embedded systems, Video game design

## Awards / Certifications

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- Dowell Federal Credit Union Scholarship (2017-2018)
- UK WRD Award – Best Visual Essay (2016) – from the English department
- UK Commonwealth Scholarship (2016-2020)
- High School Valedictorian
- MTA (Microsoft Technical Associate) certification – software development fundamentals (2016)
- Dartmouth Book Award for Academic Excellence (2015)
- CompTIA Security+ (2016), A+ (2015), IC3 (2013) IT certifications
- Eagle Scout – 6 palms (inducted 2013)