# **Timothy Hanson**

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#### **Education**

#### University of Illinois at Urbana-Champaign | Class of 2018

3.55/4.00 GPA, 3.79/4.00 CS GPA

- o B.S. Computational Physics | James Scholar | Minors in Computer Science and Mathematics
- o Computer Science Coursework: Data Structures, System Programming, Numerical Analysis, Applied Machine Learning, Computer Security I
- Physics Coursework: Classical Mechanics I & II, Electromagnetic Fields I & II, Special Relativity, Quantum Mechanics

### Work Experience

Illumina, Inc. March 2019 - Present

Software Engineer I / Software Engineer II

San Diego, CA

- Instrument software developer for NextSeq 1000/2000 Next-Generation Sequencer
  - Helped design and implement onboard sequencing software to control instrument internals, coordinate with internal cloud application, and perform and orchestrate DNA sequencing hardware routines
  - Worked on both a field engineering application and user facing application to run on CentOS compute engine using ASP.NET Core server and Angular client running in *Electron.js* desktop application

KAB Laboratories

June 2018 - March 2019

Software Engineer I

San Diego, CA

- Stallion Team Member
  - Member of Stallion team, military event simulation software, running on Jboss EAP on RedHat virtual machine
  - Helped redesign front-end from end-of-life Adobe Flash to new HTML5 & Angular 6 design
- DCGSN Onsite Developer
  - Onsite development on SPAWAR navy base, integrating Stallion software with Navy Distributed Common Ground System

Appfolio Inc. May - Aug 2017

Software Engineering Intern

Santa Barbara, CA

- o Improved stability and native image uploads to growing mobile React-native app with over 30,000 daily users
- Helped introduce OS-level unlock wrapper for public key cryptographic login to better manage user devices and improve security

## **Personal Experience**

#### **Personal Home Server**

Ongoing since Jan. 2018

Ubuntu Server 18.10

- o Built linux home server from old windows computer, globally accessible through port forwarding on home router and hansonserver.ddns.net domain
- All custom express.js controllers written for uploading, viewing, and editing files, uploading ebooks to amazon kindle library, and managing personal music library
- o Full software stack used: Node.js, Nest.js (server side typescript framework), Angular frontend, systemd configuration
- o Github repository: https://github.com/tbhanson96/homeserver-v2

## Achievements, Skills, & Interests

- Proficient Languages: C#, Java, Python, Typescript/Javascript, HTML, Node.js, Ruby
- Proficient Development Platforms: Angular, ASP.NET, React Native, Jboss EAP
- U.S. Secret Security Clearance, CompTIA Security+ Certification
- o 1st place finisher at 2012 Maryland State Impressionist Piano Competition
- o Interests & Hobbies: Piano, classical music, golf, swimming, tennis, health & nutrition