

# Timothy Hanson

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2031 Grand Ave — San Diego, CA — 92109

## Education

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**University of Illinois at Urbana-Champaign — Class of 2018** 3.55/4.00 GPA, 3.79/4.00 CS GPA

- B.S. Computational Physics — James Scholar — Minors in Computer Science and Mathematics
- *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

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**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

- 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

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**Personal Home Server** Ongoing since Jan. 2018  
*Ubuntu Server 18.10*

- 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
- Full software stack used: *Node.js*, *Nest.js* (server side typescript framework), Angular frontend, *systemd* configuration
- Github repository: <https://github.com/tbhanson96/homeserver-v2>

## Achievements, Skills, & Interests

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