

# Jack Ellenberger

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**EDUCATION** University of Chicago, Chicago IL  
B.S. Computer Science, Minor in Statistics

**EXPERIENCE** *Braintree Payments*  
**Software Engineer** June 2016 - Present  
Worked with technical writers to expand and improve functionality of braintree and paypal developer docs sites. Rewrote .NET server SDK for .NET Core compatibility, while integrating new Braintree features into the C++, Java, Ruby, Python, PHP, and Node Server SDKs. Wrote tools to allow seamless migration of sensitive customer any payment information to and from Braintree. Improved CI testing for multiple projects, expanding usefulness for non-technical users while surfacing specifically identified issues to developers.

*Revenew Inc.*  
**Operations Administrator & Technologist Intern** Summer 2015  
Wrote scripts and queries for Piwik Analytics to decrease analysis duration of 14,000+ tracked sites by a factor of 120x while collaborating with creators and users. Edited existing code base to allow for secure SSH access from .NET webapp to Ruby scripts. Designed database and storage procedures to maintain Financial Services data in cloud-based WORM compliant manner. Created automated testing environment to ensure that latency is minimized and reliability is guaranteed for a non URI routable platform. Created POC webpage to demonstrate ability to cobrand video, rendering on demand. Created procedure for duplicating and migrating Wordpress sites automatically, updated existing templates and plugins, and implemented single sign-on.

*Land O'Lakes Inc.*  
**Project Management & Application Development Intern** Summer 2013 and 2014  
Created iOS POC for a secure, internal crisis management app, oversaw its development by an offshore team, composed documentation and test scripts. Wrote tool chain to increase readability of scanned data. Implemented ELMAH system to report client side API errors to developers. Performed code maintenance and extensions on projects from previous internship. Designed and implemented public-facing API and UI for approved milk producers to archive milk quality data sets, as well as for regulators and third parties to audit. Wrote SQL calls to manage login and communication logging. Created scripts to facilitate cleaning of old data. Extended location API to allow for more useful queries.

*University of Chicago*  
**Humanities Computing Technician** October 2012 - June 2016  
Communicated with Faculty and Staff of the University to identify hardware and software issues, and to resolve them with minimal loss of data or time. Performed on site repairs, basic data recovery, and documentation management tasks.

**LANGUAGES** C, C#.NET, C++, Java, Bash, Python, CSS & HTML, JS/Node, SQL, mySQL, Linq, R, Ruby  
*Working Knowledge:* Objective-C, OpenGL / GLSL, Haskell, SML, Assembly, PHP, Yacc, awk, sed, G-code

**SKILLS** Application Programming, Unix/Linux systems, Android programming, Web development, Low-Level Programming, Database design & management, Azure systems management, High traffic Piwik instances, Wordpress templates & plugins, MVC RESTful APIs, Regular Expressions, Collaboration through git, svn, and tfs

**PROJECTS** **UNIVERSITY**  
github.com/  
jackellenberger  
Implemented PintOS kernel (C), TCP Protocol (C), FLang Compiler (SML), Optical Character Recognition (Python), Ray tracing (C), Protein Data Mining (Python), HMM for linguistic analysis (Python), TEC based 3D Ice Printer (G-Code/C++)

**PERSONAL**  
*Phyllo.apk:* A location based distributed information sharing app (mySQL, Django, Java).  
*FossFazor:* A 3D printed waveguide for Orthodynamic headphones based off the Audeze model.  
*MuLtiplication:* A Python interface for radioligand binding assays to determine solubility of novel

and published Dopamine D2 receptor-like ligands to be used by the Newman Group at the NIH.  
*ShowProdDehydron*: A 3D viewer for Dehydron distribution in proteins in Python.  
*oGrocer*: An app to crowdsource current food price trends and give consumers complete price knowledge about what to buy where  
*TennisBall Wall*: An OpenGL app that allows users to fulfill their wildest dreams of throwing tennis balls against walls.  
*ellenberger.zone*: A personal website with subdomains for each of my family members.  
*Slack Yaml Manager*: A hybrid slack bot and standalone program to allow users to execute arbitrary code using configurations generated through slack commands.  
*YamlLineNumbers*: A lightweight library to surface source line numbers in parsed ruby hashes

## INTERESTS

FOSS, Hardware Design, Operating Systems, Machine Learning, NLP, UX design, VR, Maker, Cello, Audiophilia, Video Games, Cryptography, Scientific Visualization, 3D Rendering