

# Tyler Gearing

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[Github](#) | [LinkedIn](#)

## Industry Experience

### Integration Engineer

2019 - 2020

*Synapse Financial Technologies, Inc.*

- Developed internal API **testing and automation** tools to identify, remove, and prevent **MongoDB** errors in over **1000** client objects
- Maintained client-facing libraries in **Python**, **Node.js**, and **Go** to improve integration with Synapse's API
- Reduced technical ticket volume **10%** by isolating errors and writing **efficient** and **effective bug fixes**
- Fostered close relationships with our customers' engineers to provide **best-in-class** technical support and accurate **product knowledge**

### Web Developer

2017 - 2019

*Sonoma State University - Center for Community Engagement*

- Worked for over 6 months with the Sonoma State web dev team to define custom Drupal modules for transferring the **largest internal site** at [sonoma.edu](http://sonoma.edu) to the Drupal CMS
- Formatted custom **CSS and HTML** in Drupal for over 60 internal pages and over 200 blog posts to create an engaging new website that generated a **5% increase** in community partnerships

## Technical Experience

### Python Interpreter

2019

*C++, OOP, Recursive Descent Parsing*

- Developed an interpreter to parse a context free grammar using **object-oriented** principles
- Wrote a top-down recursive descent parser to build **abstract syntax trees** evaluated using **post-order evaluation** to support over 40 grammar rules and recursive function calls

### Proxy Server

2018

*C, Kyua, ATF, TCP/IP*

- Developed a forking web proxy for the command line utilizing **TCP/IP** protocols and socket programming that could handle up to **2 Gbps** of web traffic
- Utilized **test-driven development** principles by writing over 30 unit tests using Kyua and the ATF **testing** framework

### Garlicoin

2018

*Blockchain, Cryptocurrency, C, C++*

- Helped grow a novelty crypto-coin community by providing technical support to new members on how to install and run a **full-node** on the Garlicoin network
- Researched new encryption strategies to make the coin **ASIC resistant**

### Amazon Alexa University Skill

2017

*Java, JSON, PostgreSQL, Python, AWS*

- Utilized **Agile** methods on a **SCRUM** team to develop a deliverable Alexa Skill that allowed users to access details on over **2000 events** across 120 clubs and 50 organizations

## Education

### Sonoma State University

2016 - 2019

*Bachelor of Science, Computer Science*

### American River College

2014 - 2016

*Associate's Degree, Mathematics - Associate's Degree, General Science*

**Coursework:** Algorithm Analysis, Programming Language Design, Computational Theory, Database Systems Management/Web Framework, Android Framework, Operating Systems, Software Design Principles, Computer Networking, Differential Equations, Linear Algebra, Discrete Mathematics

## Skills

**Languages:** Python, C++, C, HTML, CSS, Javascript, Go

**Design Tools:** Illustrator, Photoshop, InDesign, XD

**Frameworks:** Node.js, React + Redux, Flask, Django, Object Relational Model, API design

**Systems:** MacOSX, Windows, Linux/Unix