Liam Niehus-Staab

Seattle, WA

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Education

Grinnell College *Grinnell, IA*

BACHELOR OF ARTS *Graduate of the Class of 2020*
- Computer Science Major
- Major GPA: 3.76   Overall GPA: 3.6
- Deans list Fall 2016 and Spring 2017

Experience

Village Cook *Bemidji, MN*

CONCORDIA LANGUAGE VILLAGES, EL LAGO DEL BOSQUE *July-August 2016*
- Worked under the head chef fixing daily meals for campers and washing dishes.

Camp Counselor *Bemidji, MN*

CONCORDIA LANGUAGE VILLAGES, EL LAGO DEL BOSQUE *July-August 2017*
- Worked under Diane Tess as a Spanish immersion camp counselor, teaching children aged 6-18 Spanish conversational skills, and cultural knowledge.

Full Stack Software Engineer *Remote*

EAVE TECHNOLOGIES *July 2023 - February 2024*
- Headed product R&D after pivot to analytics, creating proofs of concept for tracking database changes, and HTTP requests
- Owned code documentation automation product, supporting writing code docs in 13 of the most popular programming languages
- Created dashboard web app with React.js and CSS flex-box to display the customer control panel for our product
- Created PostgreSQL database relations and CRUD APIs in Python FastAPI and Express.js
- Automated CI tests using Google Cloud Build and Docker
- Implemented Slack OAuth signin for the Eave website

Software Engineer II (iOS) *Remote*

HONEY (PAYPAL) *February 2021 - July 2023*
- Maintained automated deployment processes, and internal Slack bots, for Honey iOS and Android apps.
- Developed UI for product detail and checkout pages using Swift and Xcode for the Honey iOS app.
- Lead the design and implementation of automated translation system for both mobile teams, saving 6 hours of dev time each release.
- Implemented new toast notification UI, causing a 40% jump in iOS checkout flow engagement.
- Helped port the Honey iOS app from React Native to native Swift.
- Created shared CI/CD distribution pipeline to make sharing mobile code between Honey and PayPal possible.
- Lead multiple team culture/bonding activities, including regular bookclub and happy hour meetings.

Software Engineering Intern (Android) *Boulder, CO*

HONEY (PAYPAL) *June-September 2020*
- Developed the team's first automated UI tests for major parts of the Android app.
- Refactored inaccessible views to be accessible for screen readers, keyboard navigation, and large font sizes.
- Built a screen to showcase our custom UI components, enabling greater reuse and easier tweaking of their functionality.

Software Engineering Intern *Mountain View, CA*

HYTRUST INC. *June-August 2019*
- Used openAPI to make public Django API self-documenting, greatly reducing documentation update turn-around time.
- Increased products' network security by integrating SSL certificate validation between linked products in the field, utilizing openSSL.
- Used Coverity to locate and fix potential bugs in API code.

Head of Android Development *Grinnell, IA*

GRAMMIEGRAM LLC *August 2018 - June 2019*
- Led a small team in an Agile environment with a test-driven approach.
- Developed REST API in Python with Django for use in iOS and Android apps.
- Created a proof-of-concept mobile app in Java that mirrors the messaging behavior of our web app.

Research Assistant
Undergraduate Research Project, Image Synthesis for Machine Learning

Grinnell, IA

June-August 2018
- Developed a C/C++ program to generate synthetic training data for a text recognizing neural network.
- Training with data generator improved model accuracy by 10% over accuracy when trained on industry-standard data sets.
- See the research code at https://github.com/niehusst/MapTextSynthesizer
- See publication at https://ieeexplore.ieee.org/abstract/document/8978121

Co-Founder and Full Stack Developer
GrammieGram LLC

Grinnell, IA

April-August 2018
- Developed the backend for user preferences using Python and the Django framework.
- Constructed and maintained unit testing for the GrammieGram web app.
- Designed frontend UI for the contact management page using JavaScript and Bootstrap.
- Gained experience working remotely with a team using Git version control.
- See the website at https://grammiegram.com

AppDev Junior Engineer
AppDev Grinnell

Grinnell, IA

January 2018 - Spring 2020
- Developed and wrote tests in Java for the Grinnell Directory Android application
- Gained experience writing tests using JUnit, Mockito and Espresso

Skills

Programming	Java, Kotlin, C/C++, Python, JavaScript
Web	Django, Ruby on Rails, HTML5, CSS
Mobile	Android
Spoken Languages	English, Spanish

Interests Activities

Team Captain
Grinnellephants Ultimate Frisbee

Grinnell, IA

August 2018 - May 2019
- Gained experience as a teacher and leader.
- I work with others to regularly plan and execute practices 3 times a week.

Android App Development

- Making useful apps that help me with daily problems or tasks

Robot Programmer
First Robotics Competition, Team 6002

Kalamazoo, MI

Oct. 2015 - May 2016
- Wrote Java code for the robot's basic abilities and autonomous mode.

Volunteer
Poweshiek Animal League Shelter

Grinnell, IA

Sep. 2016 - May 2019
- Cleaned, cared for, and socialized cats and their environment.

Projects

Compliance Accomplice
HackUIowa

Oct 2018
- Developed email middleware using Python to detect and prevent SEC compliance violations using Natural Language Processing.
- Won "Best Commercial Potential" award from John Pappajohn Entrepreneurial Center and "Best use of Google Cloud" award from Major League Hacking.
- See project at https://github.com/niehusst/ComplianceAccomplice

MyRSA   *June 2019*

- Implemented RSA encryption from scratch in C, using openSSL calculations.
- Developed a TCP server using POSIX sockets for exchanging encrypted messages.

Robot Programmer   *Kalamazoo, MI*

FIRST ROBOTICS COMPETITION, TEAM 6002   *Oct. 2015 - May 2016*
- Wrote Java code for the robot's basic abilities and autonomous mode.
- Optimized PID controls to achieve smooth control of robot drive system.

Relevant Course Work