Newman Perry Cate

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Academics

Princeton University

BSE Computer Science (GPA 3.3, Departmental 3.8), Certificate in Entrepreneurship   *September 2015 – June 2019*
- **Favorite CS Courses**: Distributed Systems, Functional Programming, InfoSec, Computing and Optimization, Graphics
- **Entrepreneurship Courses**: Leadership Development for Business, Creativity Innovation and Design, Entrepreneurial Leadership
- **Course Assistant/Lab TA for**: Operating Systems (Fall 2017, Fall 2018), Networks (Spring 2017)

Beijing Normal University

Princeton In Beijing Chinese Language Program   *June 2016 – August 2016*

Employment

1010data

Software Developer Intern - Data Orchestration   *June 2018 – August 2018*
- Created plugins and new DAG Workflows for Apache Airflow using Flask.
- Worked with project shareholders to determine project scope and acquire iterative feedback.
- Built comprehensive early-warning system for missing records in data pipeline with Python 3 and Redis, reducing error turnaround from up to 23 hours to no more than 1 hour.

Facebook

Production Engineer Intern - Traffic Infrastructure   *June 2017 – September 2017*
- Designed and implemented a full rewrite of Traffic Infrastructure health checking service in Python 3.
- Architected extensible framework for realtime monitoring across every cluster in Facebook's internal network across all products.
- Replaced some of the oldest and most inflexible infrastructure code in Facebook's codebase, which had existed for longer than 99.5% of facebook employees had been employed.

GraySail LLC

Software Developer (Full-time during summers, part-time during school year)   *June 2014 – August 2015*
- Worked with a small team developing custom Lab Inspection software for the University of South Carolina, part of 6-year contract.
- Used frontend angular.js with asynchronous calls to custom ORM backend written in PHP.
- Designed and implemented data model for tracking radiation in research labs on campuses across the state.
- Started as a summer internship, was hired afterwards as the company's 5th developer. Worked 15 months until starting college.

Projects and Leadership

Princeton ACM (Programming Club)

President   *March 2017 – March 2018*
Led programming club in organizing biweekly talks and events, weekly newsletters, and programming competitions. More than doubled regular attendance, increasing maximum turnout from 35 to 80+.

Uniform-Chat-API

Spring Independent Work   *February 2018 – Present*
Developed a Python 3 web server that exposes a single, uniform, RESTful interface to interact with multiple chat services at once. Relied on the Falcon microservices framework. Open-Source launch date set for November 1st.

GroupMe-Utils

Personal Project   *June 2016 – October 2017*
GroupMe API wrapper written in Java. Includes multiple utilities for saving chat data and performing statistical analysis. Replaces several older projects previously written in Python 3.

Skills, Extracurriculars, and Awards

Programming Languages: Python 3, Java, JavaScript, Go, C, HTML+CSS, SQL, PHP, OCaml, Bash, K
Tools: Linux, Redis, Airflow, Git, PostgreSQL, MySQL, Docker, Pip/Virtualenv, Mercurial, Maven
Extracurriculars: Princeton Autonomous Vehicle Engineering, Lobster Club Improv Comedy, Acapellago a capella
Awards:
- **1st Place**: Google Games NYC Spring 2018 and 2016 (did not attend in 2017)
- **1st Place**: Jane Street "eth1" Fall 2015
- **Eagle Scout**: Led troop in refurbishing collected computers, donated them to Habitat for Humanity