

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*
 - **Course Assistant:** Operating Systems (Fall 2017, 2018), Networks (Spring 2017)
 - **Select CS Courses:** Algorithms and Data Structures, Operating Systems, Computer Networks, Functional Programming, Information Security, Computer Graphics, Distributed Systems, Computing and Optimization
 - **Entrepreneurship Courses:** Leadership Development for Business, Creativity Innovation and Design, Entrepreneurial Leadership
 - **Extracurriculars:** Princeton ACM, Princeton Autonomous Vehicle Engineering, Lobster Club Improv Comedy, Acapellago a capella

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
 - Emphasized extensible, maintainable architecture and robust testing framework
 - Developed new framework for easily adding new types of health checks quickly while mitigating potentially production-breaking configuration errors, replacing some of the oldest and most inflexible infrastructure code in Facebook's codebase.

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 as part of a 6-year project
 - Used frontend angular.js with asynchronous calls to custom ORM backend written in PHP.
 - Started as Summer internship 2 years into the project, was hired afterwards. Worked 15 months until starting college
 - Designed and implemented data model for tracking radiation in research labs on campuses across the state

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. Regular attendance more than doubled, with maximum turnout increasing 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.

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 and Awards

- **Programming Languages:** Python 3, Java, JavaScript, Go, C, HTML+CSS, SQL, PHP, OCaml, Bash, K, Rust
- **Tools:** Linux, Redis, Airflow, Git, Docker, Pip/Virtualenv, Mercurial, Maven, PostgreSQL, MySQL, React, Angular.js
- **1st Place:** Google Games NYC Spring 2018, 2016, Jane Street "eth1" Fall 2015
- **2nd Place:** BDPA 2014 National High School Programming Competition
- **Eagle Scout:** Led troop in refurbishing collected computers, donated them to Habitat for Humanity