Michael Griffin

Washington, DC (open to remote, open to relocation) | +1 (202)-236-7795 |
michaellngriffin@gmail.com | LinkedIn | Github

TECHNICAL SKILLS

Languages - Javascript, TypeScript, Python, SQL, PostgreSQL, HTML, CSS, Matlab, R
Libraries - React, React Testing Library, Bootstrap, jQuery
Frameworks / Tools - Node, Express, Jest, Flask, SQLAlchemy, unittest, Jinja, SASS, Git, Github

SOFTWARE ENGINEER EXPERIENCE

Foqal | Software Engineer Intern   Oct 2023 – Nov 2023
- Constructed new navigation and search filter panels, as well as a search bar for a site redesign using Bootstrap and SASS, streamlining search
- Retooled a reports summary's date picker, safeguarding it against bugs for invalid dates and an infinitely updating end date
- Collaborated on a team of 9, adhering to agile methodologies through weekly sprints and daily stand-ups

TECHNICAL PROJECTS

Friender   Live Demo | Github
- Built a full-stack, friend-finding site that incorporates a matching algorithm to recommend potential matches based on one's location
- Added authentication features using JSON Web Tokens (JWT) in the Flask backend, managing them in localStorage in the React frontend to enhance the application's security
- Constructed database with Flask to match with other users, and send private messages once matched

Warbler   Live Demo | Github
- Replicated a social media messaging app, adding user authentication through session management and bcrypt password hashing in a Flask backend
- Utilized an ORM, SQLAlchemy to manage data for users and messages, allowing users to like messages, follow others, and see a feed of their recent posts
- Implemented unit tests to identify issues and ensure reliability, boosting test coverage to 99%

Jobly   Live Demo | Github
- Designed single-page job application site, using protected routes on the React front-end
- Refined site with additional features such as a debounced search and paginated components
- Leveraged test-driven development to build a REST backend, achieving a test coverage of 98%

ADDITIONAL WORK EXPERIENCE

Postdoctoral Researcher   Jan. 2020 – July 2023

Carnegie Mellon University   Pittsburgh, PA
- Implemented a four-week longitudinal in-person study on language learning
- Managed a timely transition to remote work due to COVID-19 by rebuilding the experiment into an online study using JavaScript, and expanded recruitment procedures
- Developed and ran additional experiments, including a study of memory for location, visual search, as well as follow ups for each
- Analyzed experiments in R, created visualizations with ggplot, and taught lab members how to do the same
- Reviewed academic papers for journals, gave and received constructive feedback on peers' work

Doctoral Researcher   Aug. 2012 – Aug. 2019

University of Illinois   Champaign, IL
- Designed, programmed, and ran experiments for over 1,000 participants, both online using JavaScript and in lab using Matlab, to study working memory, the testing effect, and other topics
- Analyzed experiments using conventional statistics, Bayesian analysis, and nonparametric techniques such as bootstrapping
- Developed a novel nonparametric test and created 100MB+ simulated data sets to evaluate its reliability
- Presented findings at professional meetings and Psychonomics, a cognitive psychology conference

Instructor and Teaching Assistant   Aug. 2015 – May 2019

Instructor: Psychology 100 (5 semesters)
Teaching Assistant: Research Methods (1 semester), Research Programming (1 semester)
University of Illinois   Champaign, IL
- Developed course materials, creating lectures, study guides, writing assignments and exam questions
- Delivered lectures and led group discussions as the primary instructor for over 300 students taking Psychology 100
- As a TA, worked with students on writing and debugging programs, conducting statistics, and drafting research papers

EDUCATION

Rithm School   2023
Full Stack Web Development Bootcamp

University of Illinois at Urbana-Champaign   2019
PhD in Psychology
University of Illinois at Urbana-Champaign   2017
Masters in Psychology
Carnegie Mellon University   2011
BA in Psychology