Austin Baird

Biomedcial Group Leader

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Objective

I am a leader in biological modeling and computational mathematics. I'm looking to make a broad impact in the industry and have a strong track record of leadership and project development.

Education

University of North Carolina at Chapel Hill — *Chapel Hill, NC*

PhD in Applied Mathematics — *August 2014*

University of California, Santa Cruz — *Santa Cruz, CA*

BA in Mathematics — *June 2008*

Experience

Applied Research Associates, Inc. — *Raleigh, NC*

Biomedical Group Leader — *December 2018 - PRESENT*

- Lead a multidisciplinary team accross 4 differnet projects in charge of agile development processes, technical roadmaping and delivery scheduling, and direct communication with government customers
- Led and won six million dollars in research and development funds through Defense Health Agency grants
- Lead technical physiology modeler and principal investigator of the BioGears project
- Organized teaming accross two research hospitals and multiple small businesses

Toast — *Boston, MA*

Software Engineer Intern (Part Time) — *Feb. 2019 - June 2019*

- Built the infrastructure and automation pipeline for Android's Espresso test framework, enabling developers to use Espresso for UI tests instead of the current, significantly slower, custom Appium-based framework. Used Jenkins, AWS EC2, and Genymotion Cloud for scalability.

Drizly — *Boston, MA*

Software Engineer Intern — *May. 2018 - Aug. 2018*

- Implemented a re-designed onboarding workflow with automated Salesforce integration for new customers to streamline the onboarding process for both customers and account managers.

Facebook — *Menlo Park, CA*

Software Engineer Intern — *Jan. 2018 - Apr. 2018*

- Helped migrate the Instagram Django web server to perform parallel IO operations and handle concurrent requests within each worker process to reduce latency and increase capacity as the app scales with users and features.
- Created a framework to safely predict the performance and correctness of worker processes handling concurrent requests from a production environment. Preemptively caught and fixed regressions related to increased cpu instructions, caching, and global state contamination.

Toast — *Boston, MA*

Software Engineer Intern — *Jan. 2017 - Aug. 2017*

- Built a microservice, database schema, and related web pages to manage customer accounts — 50,000+ created within the first two months.
- Designed and helped implement a second microservice to build the foundation for upcoming payment features and reduce technical debt.
- Enhanced the audit tool to query real-time data from restaurants' Android devices, proactively resolving customers' configuration bugs.

CSTUY Hacking Sessions — *New York, NY*

Programming Mentor, TA — *Sept. 2014 - Mar. 2015*

- Taught programming concepts to high school students using Java and Processing while providing input for lesson plans and project ideas.

Projects

Shellfish

- A command line interface based on the Unix Bash shell, written in C.
- Supports EOF (Ctrl-D) and SIGINT (Ctrl-C), multiple commands per line, and chained redirection and piping.

Zero Robotics

- Semifinalist out of 200 teams in MIT's international high school programming competition in C.
- Implemented 3D vector physics and game strategy for an autonomous satellite simulation using the ZR API.

Skills

Languages Python, Java, JavaScript, C, Ruby, Hack, Scheme

Frameworks Django, Jenkins, Chef, React, Angular, Flask, AWS, Docker, GraphQL

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