# Waverly Roeger

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(806) 239-6854
**Backend Software Engineer**
New York City area (Stamford, CT)
wroeger
RogueWaverly

**Languages** Python, C++, Java, C, PostgreSQL **Tools** Django, Git, Linux, AWS Elastic Beanstalk

## Experience

### Lead Backend Engineer — Beam Impact, *seed stage NYC startup* — June 2019 — March 2021

- Held primary ownership of 5 major project backends, designing and developing RESTful APIs, designing and modeling databases, collaborating with frontend engineers, and anticipating design needs beyond initial requirements
- From scratch to launch, designed and developed the multi-client backend of Beam's primary product, the SDK integration, multiplying transactions handled per day and expanding customer reach from NYC to international
- Improved code maintainability and durability by developing code standards and best practices including thorough internal and external documentation, reusable code, comprehensive test suites, and up-to-date security schemes
- To merge customer profiles from the app and SDK and enable aggregate impact reports, implemented unification of the two systems by redesigning a cohesive database and migrating data and API functionality
- As partnerships increased, automated monthly invoicing and analytics reporting to reduce manual overhead
- Enabled the marketing team to increase customer engagement by implementing automated transactional emails and custom user segmentation through SendGrid, Klaviyo, and Mailchimp marketing platform integrations
- Researched machine learning algorithm approaches to build a personalized recommendation system
- As early core team member, actively contributed to building the startup's initial structure and culture, including interviewing and onboarding new engineers

### Software Developer — Lawrence Livermore National Laboratory — July 2017 — May 2019

- Transformed legacy static web pages of the Virtual Test Library by designing a database for assorted experiment data and recreating web pages using Django, identifying and resolving metadata inconsistencies using regular expressions
- Researched an approach to improving a spiking neuron algorithm used to solve a quadratic unconstrained binary optimization graph theory problem run on IBM's TrueNorth neurosynaptic hardware, and presented results

### Software Engineer Intern — Garmin International — May 2016 — August 2016

- Developed full-stack software, including internal firmware update functionality, for the Mac application VIRB Edit supporting VIRB series action cameras, learning Objective-C on the job

## Leadership

### Facilitator — Girls Who Code, *Christensen Middle School* — September 2017 — February 2019

- Led a middle school club of 30 students through a project-based curriculum each week, teaching computer science fundamentals and fostering community

### President — Women in Computer Science, *Arizona State University* — May 2015 — May 2017

- Increased active membership 2x, instituted lasting improvements to organization structure, and organized 50+ professional development, outreach, and social events, including a programming competition with 100+ participants

## Education

### Bachelor of Science in Computer Science — May 2017

Barrett, the Honors College at Arizona State University

- **Honors** *summa cum laude* (3.83 GPA), New American University Scholar (National Merit finalist)
- **Thesis** Mazes of Waverly Place: Interactive Algorithmic Art Generator (*roguewaverly.github.io/Mazes-Of-Waverly-Place*)