Spencer Ng

North Brunswick, NJ | github.com/spencerng | spencerng@uchicago.edu

EDUCATION

THE UNIVERSITY OF CHICAGO
BS in Computer Science,
Minor in Theater and
Performance Studies
Chicago, IL | Expected June 2023
Cumulative GPA: 3.96

MIDDLESEX COUNTY ACADEMY
Edison, NJ | Sept. 2015 - June 2019
Valedictorian of the Class of 2019
Electrical/Comp. Engineering major

SKILLS

PROGRAMMING LANGUAGES
Proficient:
Java • Python • C • C++ • C#
Familiar:
JavaScript • HTML • CSS • R
Haskell • LaTeX • Lua • MATLAB

LIBRARIES & FRAMEWORKS
Android • REST APIs • Google Cloud APIs
Unity Engine • .NET • Qt • ROS
OpenCV • Windows API • and more...

TOOLS
Git • GitHub • Gradle • Travis CI
Tableau • GitLab CI • Unix/Linux
Adobe Creative Suite • Microsoft Office

COURSEWORK

UNDERGRADUATE
Honors Intro to Computer Science I
(Haskell)
Honors Intro to Computer Science II (C)
Multiscale Modeling of Bio. Systems (R)
Intro to Computer Systems
Calculus III

OTHER
Digital Electronics
Linear Algebra
Discrete Math

LINKS

LinkedIn.com/in/spencer-ng
Devpost.com/spencerng

HONORS

Top 10%, NJ Physics & Environmental Sci.
AP Scholar with Distinction

WORK EXPERIENCE & TEAM PROJECTS

UCHICAGO IT SERVICES | Network Architecture Developer
Chicago, IL | Oct. 2019 - Present
- Automating University network switch setup and maintenance by writing Python and Perl scripts implementing RESTCONF, Slack, and Netbox APIs

AUDIQ | NJIT Neural Engineering Research Intern
Newark, NJ | June 2019 - Present
- Developing Unity game with C# to diagnose hearing disabilities by testing patients' aptitude for sound localization and pitch discrimination

HACKATHONS | PennApps Campus Ambassador
Philadelphia, PA | Sept. 2016 - Present
- Tripled the Academy's participation in hackathons, from ~10 people to 30+
- Developed RecycleMe, an Android app to find nearby centers for recyclable items with the Google Vision API, Google Maps API, and Earth911 search
- Built Synaptic Gestures (PennApps XVII Top 30 Hack of ~1.2k attendees), an Electron app to increase productivity by allowing users to customize new gestures for Synaptic touchpads with AutoHotkey

RAIDER ROBOTIX | Strategy & Scouting Team Lead
North Brunswick, NJ | Sept. 2015 - June 2019
- Developed an Android app and a Java FX desktop client with 50+ users and 100+ downloads for real-time collection and statistical analysis of match data
- Mentored 20+ primary school students to build and program LEGO robots
- Formulated competition strategy by creating data visualizations with Tableau
- Won the FIRST Mid-Atlantic Mount Olive (2017 & 2018), Montgomery (2017 & 2018), and Hatboro-Horsham (2018) District Events (of ~40 teams)

LAUNDRY MANAGER AND OPTIMIZER
Philadelphia, PA & Edison, NJ | Sept. 2018 - May 2019
- Built an Android app prototype (PennApps XVII Top 30 Hack) to recognize laundry tag symbols using models trained with Google's AutoML Vision API
- Designed an IoT hamper with Raspberry Pi and PyQt that allows users to optimize laundry loads and energy use based on deposited clothes

MIT BEAVER WORKS UNMANNED AERIAL VEHICLE RACING
Cambridge, MA | Summer 2018
- Navigated drones autonomously without use of motion-capture or GPS by developing localization, vision, and control algorithms with OpenCV and ROS

ACTIVITIES

UNIVERSITY THEATER | Stage Manager & Committee Member
Chicago, IL | Oct. 2019 - Present
- Create an inclusive rehearsal room environment for a company of 20+
- Schedule rehearsals, documented runs, and plan fight choreography for actors
- Manage stage props, set pieces, and light/sound cues during shows
- Support the needs of 10+ UChicago student theater productions annually

MAGIC (PERFORMING ARTS) | Performer & Instructor
Chicago, IL & New Jersey | Oct. 2015 - Present
- Designed and taught a 20-week sleight-of-hand magic class to children 8+
- Entertain crowds of up to 200 at community events and birthday parties