FILIP MAZUREK

✉ filip@filipmazurek.com   🔗 www.filipmazurek.com/   in linkedin.com/in/f-mazurek   ⚬ github.com/filipmazurek

EDUCATION

Duke University	Ph.D.	🏛 Electrical & Computer Engineering	📅 Aug 2020 – Present	
Duke University	B.S.	🏛 Computer Science	📅 Aug 2014 – May 2018	📄 GPA: 3.78 / 4.00

EXPERIENCE

Senior Software Engineer   **Avenu**   📅 March 2020 – Present   📍 Remote

Avenu is an early stage startup focused on event promotion. I have been building the technical side of the company

- Migrated the backend to be more flexible while building the application infrastructure
- Interviewed and led a team of 8 undergraduate student interns over summer 2020 to build the mobile application part of Avenu
- Implemented a standard set of Agile procedures to bring structure to the engineering department

Research Intern   **Argonne National Lab**   📅 May 2020 – Aug 2020   📍 Chicago, IL

- Worked on a project team to create a quantum computer simulator based on tensor network contractions and optimized for the QAOA quantum algorithm
- Identified algorithms which find an approximately optimal elimination order of tensor network nodes
- Created automated benchmarks to investigate the effects of tensor network pre-processing on finding a good node elimination order

Associate UX Designer   **Appian**   📅 Aug 2018 – Aug 2019   📍 Reston, VA

Appian is a low-code platform as a service which specializes in quick deployment for enterprise applications simultaneously on web and mobile

- Created detailed wireframes and interactions for 2 new features every quarter as an expert on iOS and Android application design
- Conducted user testing and research to iterate on features
- Developed training courses on user testing for UX Designers and Product Managers to standardize procedure within the company

Student UX Designer   **Duke UX Department**   📅 Aug 2017 – Dec 2017   📍 Durham, NC

- Identified a need to inform students about exhibits on display in the library and in off-campus buildings
- Conducted user tests and summarized findings to improve library website layout and content

Software Engineer Intern   **Appian**   📅 May 2017 – Aug 2017   📍 Reston, VA

- Built an easy-to-configure expression to simplify pulling data from a database and display it in a custom layout using Java.
- Presented the new feature to the founders of Appian, senior engineers, and customers during Appian's quarterly release demo day

Engineering Research Technician   **CDC / NIOSH**   📅 May 2015 – Aug 2015   📍 Morgantown, WV

The Center for Disease Control (CDC) is the US national health protection agency. NIOSH is the occupational health branch

- Used Matlab machine learning to optimize classification parameters for rat breathing data in an investigation to parametrize the effects of silicosis on breathing.
- Found that each dataset required specific calibration depending on breathing chamber used before classification.

Research Assistant   **Duke Biology Dept.**   📅 Sep 2014 – Aug 2015   📍 Durham, NC

- Performed differential counts on baboon blood treated with the Wright-Giemsa stain to investigate the effects of baboon colonies living near human populations.

LEADERSHIP

Teaching Assistant   **Duke University**   📅 Jan 2017 – May 2018   📍 Durham, NC

TA for the Computer Architecture class (CS/ECE 250). Taught students computer architecture principles and the basics of C during discussion sections. Administered and graded exams, graded homework, and held office hours.

Makers Club Executive   **Duke University**   📅 Sep 2016 – May 2017   📍 Durham, NC

Created and led twice-monthly technology workshops which focused on creating practical devices. Taught CAD, 3D printing, Arduino coding with breadboards, and Raspberry Pi use.