Benjamin Taufen

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EDUCATION

University of St. Thomas, St. Paul, Minnesota

- Major: **Computer Science** — Graduation: May 2018
  - Cumulative GPA: 3.92 / 4.00
  - Related Courses: Data Structures, Machine Learning, Information Security, Object Oriented Design, Computer Architecture, Database Design, SE Capstone
- Minor in **Mathematics**
  - Related Courses: Linear Algebra, Applied Math & Modeling, Multi-variable Calculus, Differential Equations

RESEARCH EXPERIENCE

University of St. Thomas, *Research Assistant*, St. Paul, MN — Sep 2016 – Feb 2017

- B. Taufen, J. Sawin, and D. Chiu. Improving the Querying Efficiency of the PLWAH Bitmap Algorithm. In Proceedings of the 21st International Database Engineering and Applications Symposium (IDEAS'17). Bristol, UK. 2017.
- Created algorithms to speed queries using compression schemes and metadata
- Analyzed data to determine how to implement these algorithms into the query process
- Collaborated with professor to develop query engine and test bed using Java

PROJECTS

Android Stock Market App — Feb 2017 – May 2017

- Designed and implemented Android app using Android Studio
- Utilized APIs to gather stock data into JSON
- Integrated a NodeJS API to communicate with the database
- Acquired strong communication skills while collaborating with different teams

Voice Automated Drink Machine — Jan 2017

- Built an Alexa Skill using Alexa Skills Kit
- Leveraged AWS Lambda python function to program the Alexa Skill
- Implemented device shadows for AWS IoT to communicate with Rasperry Pi GPIO

INTERNSHIP EXPERIENCE

Security Engineer Intern

Digi-Key Electronics, Bloomington, MN — Apr 2017 – Present

- Built a Vendor Risk Management program to assess risk with current and future vendors
- Conduct strategic, handcrafted phishing campaigns leveraging HTML and Javascript
- Lead Proof Of Concept projects enabling me to compare and communicate with vendors

IT and Application Development Intern

Xcel Energy Nuclear Power Plant, Monticello, MN — Feb 2016 – Jun 2016

- Proofread and reported mistakes in code for system upgrading utilizing programming knowledge and keen attention to detail
- Acquired knowledge of building systems to represent data necessary for nuclear energy

ACTIVITIES

Coach, Monticello Varsity and Youth Lacrosse Teams — Monticello — Apr 2014 – Present

- Develop leadership and teaching skills while motivating young athletes to compete
- Coach and train over 40 young athletes

Player, Lacrosse Team — University of St. Thomas — Sep 2014 – Present

- Executed under high-stress situations to win the 2016 MCLA National Championship
- Scored 30 goals and competed at a high level because of hard work, self-motivation, and training up to 14 hours a week

Member, Computer Science Club — University of St. Thomas — Sep 2016 – Present

SKILLS AND INTERESTS

- Proficient in Java and LaTeX through coursework and research
- Competent in Linux by using Raspberry Pi for projects
- Familiar with C, NodeJS, Javascript, Python, SQL, HTML and MatLab through courses and projects