

Luke Ponssen

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EDUCATION

B.S. Computer Science and Engineering

Sep 2022—Present

Santa Clara University Honors Program | Santa Clara, CA

GPA: 3.93

Relevant Coursework: Abstract Data Types & Structures, Logic Design, Embedded Systems, Object-Oriented Programming & Advanced Data Structures, Calculus/Analytic Geometry III-IV, Discrete Math, Differential Equations

PROFESSIONAL EXPERIENCE

Full-Stack Developer

Jul 2023—Present

AIMS Team, LLC | Fremont, CA

- Spend 200+ hours engineering full-stack solutions and constructing web/mobile apps for 20 water/wastewater districts
- Import over 1,000,000 assets and their features using SQL and create spatial relationships using ArcGIS Maps SDK
- Implement 50+ application features using C#, JS, HTML, and ASP.NET to standardize code across all applications
- Manipulate over 2TB of data from clients in SQL and Microsoft Access Database and connect it to the frontend app
- Engineer 3 full-production mobile applications using ArcGIS Online and REST API Services to connect to database

RESEARCH EXPERIENCE

Misinformation Research Assistant

Jun 2023—Present

Santa Clara University | Santa Clara, CA

- Scrape Twitter for 1200 tweets regarding controversial topics that potentially contain misinformation, trolling, or both
- Construct training datasets for machine learning models by labeling over 1200 tweets as misinformation or trolling
- Collaborate/consult with Dr. Liu, Dr. Jazaieri, and 5 students majoring in psychology, business, and computer science
- Present weekly project progression and new obstacles, update codebook with 10+ specific rules and example tweets

HCI Lab Researcher

Jan 2023—Present

Human-Computer Interaction Lab at Santa Clara University | Santa Clara, CA

- Collaborate with 3 seniors and 1 professor to create a [digital twin](#) of university dorms using augmented/virtual reality
- Implement Matterport SDK with Javascript to make 10 3D virtual scans of dorms accessible for prospective students
- Contribute original ideas and research in weekly 3 hour meetings and guide our work using Agile Scrum methodology
- Research user experience by gathering data and feedback from students about how current virtual tours can improve

Machine Learning Researcher

May 2020—Nov 2021

Aspiring Scholars Directed Research Program | Fremont, CA

- Coordinated/facilitated team meetings with advisors and team, distributed tasks/responsibilities among 6 members
- Compiled, organized, and processed 531,468 county-level demographic, economic, and education-related data points
- Increased Multilayer Perceptron classifier accuracy 15% by effectively implementing industry professional feedback
- Presented the implications of statistically outstanding bellwether attributes at Southern California Conference for Undergraduate Research (SCCURE) 2021 which hosted over 700 online participants
- [Publication](#): Ponssen, Luke, et al. "Using Classification Models to Analyze Bellwether Counties in U.S. Presidential Elections." *Seriatim Journal of American Politics*, vol. 3, no. 2, 2021, pp. 8-21.

PROJECTS

- [My Website](#): I created a website portfolio with no previous knowledge of website development; I learned through trial and error how to use HTML, Javascript, and CSS to create pages, customize the UI/UX, automate typing animations, color titles with gradients, and utilize external libraries to make the website interactive
- [Recreation of Mario](#): I created an animated character that navigates a complex 2-D map, collects coins, dodges enemies, and performs super-jumps; I used Java and Processing to implement object collisions and platform detection

SKILLS

- Spoken Languages: English, native; Spanish, proficient | Spanish Immersion Program (K-8) and AP Spanish
- Coding Languages: Python (4yr), Java (2yr), HTML (1yr), CSS (1yr), Javascript (<1yr), C & C# (<1yr), SQL (<1yr)

AWARDS AND DISTINCTIONS

- Santa Clara University 2023 Maker Product Design Challenge [2nd Place \(\\$1500\)](#)
- Aspiring Scholars Directed Research Program (ASDRP) Leadership Award, California State Seal of Biliteracy