Billy Sudirdja, Software Engineer

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EMPLOYMENT HISTORY

| Sep 2022 — Sep 2023 | **Certified Repair Technician, Asurion** | San Diego |

- Use diagnostic tools, manuals, and technical knowledge to determine the root causes of equipment failures or performance issues.
- Perform repairs, replacements, and maintenance tasks on faulty components.
- Work with **Samsung**, **Google** and **Apple** to calibrate hardware based on procedure to ensure equipment meets performance and safety standards.

| Aug 2022 — Sep 2022 | **Customer Service Representative, Soapy Joes** | San Diego |

- Greet customers, answer their questions, and provide information about available packages, and pricing.
- Inspect vehicles before and after the car wash to ensure high-quality service delivery and identify any potential issues.
- Identify opportunities to promote additional services, such as detailing, waxing, or interior cleaning, based on customer preferences and vehicle needs.

| Jan 2019 — Apr 2021 | **Summer Intern, Stanford Linear Accelerator Center** | Menlo Park |

- Developed scripts for automation using **Jython**.
- Experience design and development for gas equipment with **AutoCAD**
- Developed in **Ignition** to display power distribution to PLC's
- Assisted in engineering and installing Oxygen Deficiency Monitors made with copper tubing and compressed air

| Jan 2019 — Apr 2020 | **Peer Instructor, Skyline College** | San Bruno |

- Facilitated discussions to help students develop communication and **problem-solving** skills
- Motivated students to think critically and become independent learners
- Developed lesson plans that effectively addressed each student's academic needs

PROJECTS

Music Notes　　　　　U.C.S.D

- Created an application using **JavaScript, CSS, HTML, ElectronJS.**
- Collaborated with 10 people for a continuous integration pipeline and version control using **Git** and Github.
- Developed unit testing with **Jest** and end-to-end testing with **Playwright.**
- Wrote and automated documentation using **JSDocs**.

Huffman Compression/Decompression Tool　　　　　U.C.S.D

- Designed and programmed a **Huffman compression** and **decompression** tool in C++
- Constructed a Huffman tree using a bit-wise buffer and tree serialization, leading to a **70% decrease** in file size
- Optimized and profiled runtime using **gprof** (GNU Profiler), leading to a 10% decrease in overall runtime

EDUCATION

| Aug 2020 — Dec 2023 | **Bachelors, University of California San Diego** | La Jolla |

Bachelors in Computer Engineering and Minor in Mathematics

| Aug 2016 — May 2020 | **Associates, Skyline College** | San Bruno |

Associates for Transfer in Computer Science, Physics and Mathematics

SKILLS

Python	C/C++
JavaScript	Verilog