**JEREMY BADGER**

| Santa Ana, California | (813) 748 - 0979 | jeremebadger@gmail.com | [linkedin.com/in/jeremybadge](http://linkedin.com/in/jeremybadger) | [github.com/jbadge](https://github.com/jbadge) |
| --- | --- | --- | --- | --- |

**EDUCATION**

| **Suncoast Developers Guild –** St. Petersburg, FL | June 2024 |
| --- | --- |
| * Full Stack Engineering Program |  |
| **University of California, Santa Barbara** – Santa Barbara, CA | August 2019 |
| * Bachelor of Science in Physics, Minor in Astronomy & Planetary Science |  |

**SKILLS**

**Programming Languages**: JavaScript, TypeScript, C#, C++, Python, Java, Assembly, Bash, Matlab, LaTeX

**AI Tools**: ChatGPT, Cody

**Development Tools**: React.js, Node.js, ASP.NET, Vite, HTML5, CSS

**Databases**: SQL, PostgreSQL, Entity Framework, Linq

**EXPERIENCE**

| **Instructional Lab Coordinator | Lower Division Physics** | August 2019 – March 2021 |
| --- | --- |
| University of California, Santa Barbara |  |
| * Conceptualized and produced remote learning curriculum for lower division physics courses. * Guided 20+ graduate student team-leaders, delivering weekly lectures, teaching new material and facilitating general and instructional problem resolution. | |
| **Data Research Analyst | Imaging Pipeline** | January 2018 – August 2019 |
| UCSB Experimental Cosmology Group, SETI *– Search for Directed Intelligence (SDI)*   * Led team of ~10 researchers, under Dr. Phillip Lubin, decreasing pipeline runtime duration by 50%. * Organized bi-weekly meetings to address and resolve programming and pipeline issues. * Took initiative to debug and refactor non-working Python code and develop new code for image analysis pipeline. | |
| **Laboratory Assistant | IT Coordinator, System Administrator** | January 2018 – August 2019 |
| University of California, Santa Barbara |  |
| * Managed and maintained network infrastructure and system administration, ensuring optimal performance and reliability of Windows, Mac, and Linux systems. * Assisted in lab projects for Modern Design course, including additive and subtractive manufacturing projects (Siemens NX, CAM design, 3D printing, laser-cut etchings and CNC fabrication). | |
| **Physics Tutor at the Tutoring Center** | November 2015 – July 2016 |
| Los Angeles Valley College |  |
| * Worked with undergraduate students struggling in physics to understand various concepts within the discipline. | |

**SELECTED PROJECTS**

**Full Stack Projects**

* Visit [github.com/jbadge](https://github.com/jbadge)

**Assembly & Digital Circuit Design**

* Implemented low level loops in Assembly, designed Digital Logic Circuits and Finite State Machines.

**Linked-List & Binary Search Tree Card Game**

* Created a two-player card game in C++, utilizing a binary search tree for extended functionality.

**Harmonograph**

* Simulated two-pendulum harmonograph to draw images on a Raspberry Pi.

**Website for Undergraduate Diversity and Inclusion in Physics (UDIP)**

* Developed and launched UDIP website over a weekend to meet Fall 2018 deadline. Self-taught HTML5 and CSS, with no prior experience.

**PUBLICATIONS**

Polanski, A., Lebaron, N., **Badger, J.**, et al. 2024. *The Search for Directed Intelligence: Image Processing.*

In Progress, Physics Department, University of California, Santa Barbara.