

# Dillon B. Allen

U.S. Citizen

Visalia, California

Cell: 559-901-8162

Email: dillon.allen.92@gmail.com

**Objective:** To apply my knowledge of data analysis, statistical methods and mathematical analysis to cutting edge engineering problems.

## Technical Skills

---

- Mathematical Modeling and AI Modeling
- Kalman Filter and Smoothing Algorithms
- Estimation Algorithms
- Data Driven Design
- Simulation Design
- Statistical and Machine Learning
- Stochastic Models, Monte Carlo Methods
- MATLAB / C++ / Modern Fortran / Python / C

## Engineering Experience

---

### College of the Sequoias – Visalia, CA

Aug 2023 – Present

Engineering Professor

- Teach MATLAB, Computer Architecture, Discrete Mathematics, Introduction to Engineering, Engineering Graphics (SolidWorks), Engineering Statics, Material Science, Engineering Circuits.

### John's Hopkins Applied Physics Lab – Laurel, MD

May 2023 – Aug 2024

ATLAS Intern

- Conduct statistical analyses on big data sets to develop efficient compression algorithms.
- Simulation design and analysis in AFSIM.
- Developed probabilistic models for operational usage in MATLAB and Python.

### Lockheed Martin, Space – Sunnyvale, CA

Jan 2022 – Jan 2023

Guidance, Navigation and Control Engineer

- Conduct statistical analyses on big data sets to draw design conclusions
- Present analyses and design conclusions to chief engineers and stakeholders
- Monte Carlo Probabilistic Simulations for Systems Engineering Work
- Create Mathematical Models for IRAD Studies
- Implement/design clustering and discrimination algorithms
- Simulation Development for GNC IRADs

### SAIC – Oxnard, CA

July 2019 – July 2020

Electrical Engineer – *High Power Electronic Attack Technique Radiation Group*

- Requirement Analysis on Next Generation Jammer – Mid Band.
- Developed software to automate test point analysis and report creation.
- Wrote Detailed Methods of Test reports and supervised test runs.
- Generated Verification and Validation Matrices.
- Implemented custom NI VISA scripts for instrumentation and data collection.

## Education

---

### Fresno State University

Est. May 2026

M.S. Mathematics

### Johns Hopkins University, Whiting College of Engineering

Dec 2021

M.S. Space Systems Engineering

### University of California at Santa Barbara, College of Letters and Science

June 2017

B.S. Physics