

# Brian Rieder

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## EDUCATION

### PURDUE UNIVERSITY

**BS IN COMPUTER ENGINEERING**  
West Lafayette, Indiana  
Expected Graduation: May 2017  
College of Engineering  
Dean's List (All Semesters)  
Cum. GPA: 3.65 / 4.0

### PENN HIGH SCHOOL

Grad. May 2012 | Mishawaka, Indiana

## LINKS

Github:// [brian-rieder](#)  
LinkedIn:// [Brian Rieder](#)

## SKILLS

### PROGRAMMING

Over 5000 lines:

C • Shell • JavaScript • PHP

Over 1000 lines:

MSSQL • Python • HTML/CSS •

Assembly

Familiar:

Ruby • Matlab • Android •  $\text{\LaTeX}$

Introductory Knowledge:

Ada • Java • Visual Basic • Haskell • Scala

## COURSEWORK

### UNDERGRADUATE

Data Structures and Algorithms

Functional Programming

Object Oriented Programming

Unix Tools and Scripting

Microprocessor Interfacing

*Research Assistant*

Cloud-based Programming Interfaces

*Teaching Assistant*

Advanced C Programming

## ACTIVITIES

- Eagle Scout in the Boy Scouts of America
- Eta Kappa Nu (HKN) ECE Honor Society
- Five Session Co-op in the Professional Practice Organization
- Member of the Electrical and Computer Engineering Student Society

## INDUSTRY EXPERIENCE

### GENERAL ELECTRIC AVIATION | INFRA-ENGINEERING CO-OP/INTERN

August 2013 - August 2016 (Rotational) | Grand Rapids, MI

### ADVANCED COMMON MODELING ENVIRONMENT (ACME) WEB DEVELOPER

- Created a web based interface for users to interact with an Enterprise Architect driven database.
- Increased autonomy of data entry processes and diagram creation for customer presentation through user of **jQueryUI** and **yFiles** libraries in **Javascript**.
- Back-end server and database interfacing with **PHP** and **MSSQL** to retrieve, update, and delete entries from tables with minimal user interaction.

### PLATFORM ARCHITECTURE STUDY LEAD SUB-SECTION ENGINEER

- Lead modeling design engineer on the Platform Architecture Study Internal Research and Development (IRAD) team working to create a model to migrate future era business jets from a federated platform to a General Electric designed **Integrated Modular Architecture (IMA)**.
- Led model contribution for assigned subsections of the general purpose business jet model to be delivered to **Dassault Systèmes** and **Gulfstream Aerospace**.
- Oversaw the creation and analysis of ATA 100 defined subsystems 26, 28, and 38: **Fire Protection, Fuel System, and Water and Waste**.
- Performed functional decomposition, electrical hardware analysis, and software partitioning for input/output allocation to the underlying IMA.

### P-8 POSEIDON FLIGHT MANAGEMENT SYSTEMS ENGINEER

- Contributed to the design of the P-8A, P-8I, and P-8AAS flight management systems.
- Acted as a fully functional **Systems Engineer** and performed **Verification and Validation Testing**.
- Utilized **Ada** programming application to **embedded systems** and scripted AutoTest execution with **Visual Basic**.

## ACADEMIA EXPERIENCE

### WEB PROGRAMMING INTERFACE | LEAD BACK-END DEVELOPER

August 2014 - December 2014 | West Lafayette, IN

- Constructed a cloud-based programming interface for the Advanced C Programming course in the Computer Engineering department.
- Led the development of the back-end interface created primarily in **Python** using Apache and Django.

### ADVANCED C PROGRAMMING TEACHING STAFF |

### UNDERGRADUATE TEACHING ASSISTANT

May 2014 - December 2015 | West Lafayette, IN

- Reconstructed the course grading back-end through utilization of a university server to instantaneously pull, grade, and email results upon receiving submissions using **Bash**.
- Assisted Dr. Alexander Quinn and Dr. Yung-Hsiang Lu in course administration and oversaw grading as well as lab hours.