

Jeremy Chang

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Education

Purdue University

B.S. COMPUTER SCIENCE, MINOR IN MATHEMATICS

- GPA: 3.70/4.00

West Lafayette, IN

Aug 2017 - May 2021

Experience

Amazon Web Services

SOFTWARE DEVELOPER ENGINEER INTERN

Seattle, WA

May 2020 - Aug 2020

- Created a new feature for a key-value store that allows a user, for a given key, to dynamically generate or reference a value.
- Designed various systems to securely generate random strings that can handle up to 1000 transactions per second.
- Leveraged DynamoDB's optimistic locking to implement a monotonically increasing index for distributed systems.

Purdue Discovery Park Undergraduate Research Internship

UNDERGRADUATE RESEARCH INTERN

West Lafayette, IN

Aug 2019 - May 2020

- Automated a process that downloaded data sets from Food and Agriculture Organization of the UN and applied data transformations.
- Developed a Singularity image registry web server prototype to store images of statistical analyses.
- Utilized GitHub actions to create a CI/CD pipeline to create an image and push to the Singularity registry.

The Climate Corporation

SOFTWARE ENGINEERING INTERN

St. Louis, MO

May 2019 - Aug 2019

- Created a micro service that preprocesses sensor data from farms to be transformed into digital maps of farm fields.
- Manipulated geospatial data to reduce large data processing jobs into smaller uniform jobs.
- Restored hundreds of farmer digital map data by successfully processing sensor data from large farm fields.

US Bank

FULL STACK DEVELOPER INTERN

St. Louis, MO

Jun 2018 - Aug 2018

- Developed a web application to manage database tables with Microsoft's web application framework (ASP.NET MVC).
- Redesigned database tables to provide an audit trail for groups of accounts that owe money.
- Updated stored procedures and functions that generate reports affected by table design changes.

Purdue College of Science

UNDERGRADUATE TEACHING ASSISTANT

West Lafayette, IN

Aug 2019 - Present

- Problem Solving and Object-Oriented Programming
- Foundations of Computer Science (Discrete Math)

Projects

Purdue Wash Server A server written in Go that scrapes Purdue laundry website to provide an API for an iOS application.

FoodCycle An iOS application that allows a user to log their nutritional information from a picture of their meal.

Dollar for Dollar An Dollar General Alexa skill that allows customers to ask about food prices and add to their digital shopping cart.

Sunshine An Alexa skill and web application that suggests clothing based on the user's response to different weather conditions.

Skills

Languages Java, Python, Scala, C/C++, Go, Bash, JavaScript, MATLAB, SQL

Technologies Scalatra Swagger, sbt, ASP.NET MVC, SQL Server, AWS, NodeJS, SQLite3, UNIX, Git

Honors and Awards

2019-2020 **DURI Program Research Fellowship**, Purdue University

West Lafayette, IN

2018 **Vandyhacks Dollar General Challenge Winner**, Vanderbilt University

Nashville, TN

2018 **AITP SigAPP Challenge, Second Place**, Purdue University

West Lafayette, IN

2017-2020 **Dean's List and Semester Honors**, Purdue University

West Lafayette, IN