

# Aaron Beomjun Bae

3400 Avenue of the Arts, Unit H322, Costa Mesa, CA 92626

(206) 659-2131 | [beomjuna@uci.edu](mailto:beomjuna@uci.edu) | [linkedin.com/in/aaron-bae](https://www.linkedin.com/in/aaron-bae) | [github.com/aaronbae/](https://github.com/aaronbae/)

---

## EDUCATION

---

- University of California – Irvine**, Master of Science in Computer Science Sept. 2019 – Dec. 2020  
(Expected)
- Focus on Natural Language Processing Research as a Data Science Researcher
  - A paper on BERT based models on Dialogue dataset in the works for journal submission.
- University of Washington**, Bachelor of Science in Mathematics Sept. 2015 – June, 2019
- Member of the Sigma Nu Fraternity. Served as a Chapter Representative.
  - Impacted a student organization's recruitment process by creating an automatic resume reviewer using a machine learning algorithm.
- 

## EXPERIENCE

---

- Computer Science Researcher** March 2020 – Present  
*University of California, Irvine*
- Developed a BERT-based transformer languages model that achieved 76.0 F1 score in classifying questions from a dialogue-based dataset.
  - Lead a team of engineers, and presented weekly reports to graduate advisors and industry managers
- Computer Science Researcher** Jan. – June, 2019  
*University of Washington*
- Created a probabilistic model to statistically prove political gerrymandering in Washington.
  - Worked with a team of engineers to build a React based simulation and visualization tool.
- Software Engineer** Oct 2017. - March, 2018  
*University of Washington*
- Worked as a software engineer for Husky Snow club, a University student organization.
  - Built tools that were used to recruit and help the officers run club activities.
- Software Engineering Intern** June – Sept., 2017  
*Crowd Cow*
- Created a dashboard to display company KPIs to the management team.
  - Directly worked with a team of front-end and back-end engineering leads.
- 

## PROJECTS – AVAILABLE IN GITHUB

---

- HighCurve (Currently in Progress)** 2020
- Stock recommendation application built on Express backend and NextJS Frontend
  - Automated CRON data pulling feature
  - Automated notification through node-mailer
  - Custom designed data scheme for managing Stock data on Mongo
  - Runs all API points on minimal resource environment
  - Machine learning on company profile information to recommend investment on historical OHLC data
- Image Recognition over IoT Network** 2020
- An identification system to recognize the presence of an automobile in an intersection.
  - Used AWS GreenGrass and MS Azure IoT to deploy MXNet.
  - Used Docker and AWS Lambda for deployment
- aaronbae.com** 2020
- Personal website that shows previous projects and my experience
  - Custom blog post creator with S3 Image insertion feature.
  - Backend built on Express and frontend built on NextJS
- 

## SKILLS

---

### Data Modeling Skills

- Python, Jupyter Notebook, PyTorch, Pandas, NLTK
- Basic familiarity with R and Tableau
- Comprehensive understanding of CNN, LSTM, Transformers, SVM, and other common models
- Ability to develop a big data pipeline

### Full-Stack Skills

- **Core Frameworks:** NodeJs, React, Redux, and Express
- **Basic Web:** HTML, JavaScript, Bootstrap 4, REST
- **AWS Products:** EC2, RDS, S3, and Lambda
- **Database Products:** MongoDB, SQL, Apache Spark
- **Other:** Java, Docker, Linux, SSH, and Git