

# Zhechun Zhou

 [github.com/ZhechunZhou](https://github.com/ZhechunZhou)

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## EDUCATION

|   |                            |
|---|----------------------------|
| <b>Carnegie Mellon University</b><br><i>M.S. in Information Technology (GPA: 3.37)</i>                            | <i>Aug 2020 – May 2022</i> |
| <b>University of Wisconsin-Madison</b><br><i>Exchange Program in Computer Science (GPA: 3.67)</i>                 | <i>Sep 2018 – May 2019</i> |
| <b>The University of Sydney</b><br><i>B.S. in Computer Science &amp; B.E. in Computer Engineering (WAM: 74.2)</i> | <i>Feb 2016 – Jun 2020</i> |

## PROFESSIONAL EXPERIENCE

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|--|----------------------------|
| <b>Wisecar Group</b><br><i>Full Stack Web Developer Intern</i>   | <i>Sep 2021 – Nov 2021</i> |
| <ul style="list-style-type: none"><li>- Utilised Golang to develop a RESTful back-end system with Multi-Factor Authentication and AES-256 encrypted file transaction features allowing companies to store and access vehicle information securely.</li><li>- Designed and constructed administration interface with Failure-atomic transaction feature using React.js, Redux Saga, and TailwindCSS for customers to visualize and process vehicle usage logs like track records and fuel usage.</li></ul>  |                            |
| <b>UW-Madison Database Group</b> <a href="#">Conference link</a><br><i>Research Assistant</i>  | <i>Dec 2019 – Feb 2020</i> |
| <ul style="list-style-type: none"><li>- Developed and fine tuned a multi-head self-attention machine learning model (Picket) to detect anomalies and recover corrupted in tabular datasets. Such a model achieved above 80 points AUROC across various noise and ML models.</li></ul>  |                            |
| <b>Wisconsin HCI Lab</b> <a href="#">demo link</a> <a href="#">code link</a><br><i>Research Assistant</i>  | <i>Jun 2019 – Aug 2019</i> |
| <ul style="list-style-type: none"><li>- Developed a web portal using Unity and C# simulating the interaction between passengers and a guidance robot in an airport scenario allowing researchers to perform machine learning in these use cases.</li><li>- Implemented Firebase cloud storage and WebSocket full-duplex communication channel achieved handshake between the portal and the backend machine learning algorithms.</li><li>- Deployed the system on website and experimented it using AWS Mturk and collected data from 56 participants.</li></ul> |                            |

## ACADEMIC PROJECTS

|   |                        |
|---|------------------------|
| <b>Web based Social Media with Video Chat feature</b>   | <i>CMU, 2021 Sem1</i>  |
| <ul style="list-style-type: none"><li>- Used Django implementing a twitter-like social media web-site with real-time post update feature.</li><li>- Used WebRTC and PeerJs to achieve video chat room feature allowing 2-4 user to meet online.</li></ul>         |                        |
| <b>Graphic Dashboard of BEACH database</b>  | <i>USYD, 2019 Sem2</i> |
| <ul style="list-style-type: none"><li>- Prepared and summarized medical records in the BEACH database with Pandas and MySQL to reduce redundancy.</li><li>- Visualized geographic data as map on a web-based dashboard with Spring, Echart and Leaflet.</li></ul> |                        |
| <i>more projects can be found on my personal web-page <a href="http://www.zhechundemo.com/projects">www.zhechundemo.com/projects</a></i>  |                        |

## SKILLS

|                               |  |
|-------------------------------|--|
| <b>Programming:</b>           | Golang, Java, Python, TypeScript, C++, C, C#   |
| <b>Backend:</b>               | Gin, Gorm; Spring, Springboot; Django, Google RPC  |
| <b>Web Frontend:</b>          | JQuery, React.js, Redux Saga, Tailwind CSS   |
| <b>Tools &amp; Framework:</b> | <b>Database &amp; Big Data:</b> MySQL, PostgreSQL, MongoDB, Hadoop, Spark, Firebase<br><b>Cloud Computing:</b> AWS EC2, AWS S3, AWS ECS, Google Spanner, Google Domains<br><b>Others:</b> Docker, Git, Gradle, Maven |

## PUBLICATIONS & AWARD

|   |   |
|---|---|
| <ul style="list-style-type: none"><li>- T. Picket: guarding against corrupted data in tabular data during learning and inference<br/>The VLDB Journal (2021). <a href="https://doi.org/10.1007/s00778-021-00699-w">doi.org/10.1007/s00778-021-00699-w</a></li></ul> |   |
| <ul style="list-style-type: none"><li>- Vice Chancellor's Global Mobility Scholarship</li></ul>   | <i>The University of Sydney, 2019</i>   |
| <ul style="list-style-type: none"><li>- Young Asian Leaders Scholarship</li></ul>   | <i>Carnegie Mellon University, 2020</i> |