

# Michael Pham

ktm-p.net

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## EDUCATION

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- **River City High School** West Sacramento, CA  
*High School Diploma* *Mar 2019 – Jun 2022*
  - GPA: 4.00
  - Graduated Salutatorian
- **University of California, Berkeley** Berkeley, CA  
*B.A. in Computer Science and Mathematics* *Aug 2022 – Present*  
*Minor in Data Science*
  - GPA: 3.83
  - Member of Upsilon Pi Epsilon Honor Society

## TEACHING EXPERIENCE

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- **River City High School** West Sacramento, CA  
*Teaching Assistant* *Aug 2021 – May 2022*
  - Worked as a student teaching assistant for school's AP Calculus course.
  - Taught some classes, presenting key concepts in a clear and concise manner to students, along with working through examples to help deepen their understanding of the material.
  - Helped design assignments such as in-class work, homework, and exam problems to reinforce core ideas.
  - Graded assignments from students and offered clear explanations on areas to improve upon.
- **River City High School** West Sacramento, CA  
*After-school Tutor* *Aug 2019 – May 2022*
  - Volunteer tutor for mathematics, ranging from Algebra 1 to AP Calculus BC and AP Statistics.
  - Clearly explained core concepts to students and provided help on assignments.

## PROJECTS

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- **Spam Classifier** | Python, Matplotlib, NumPy, Pandas, RegEx, scikit-learn, Seaborn
  - Created a spam email filter using a Logistic Regression model. Achieved an accuracy of 99.2% on given test data.
  - Cleaned and visualized data using Pandas, RegEx, Matplotlib, and Seaborn.
  - Fine-tuned hyperparameters by cross-validation with GridSearchCV.
- **MNIST** | Python, Matplotlib, PyTorch
  - Machine Learning project to match handwritten digits.
  - Initially implemented two-layer Linear Neural Network with ReLU activation function and Cross-Entropy loss.
  - Implemented Convolutional Layer to take into account spatial features of image and flattened it down.
  - Achieved almost 99% accuracy on given test data.

## SKILLS

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- **Programming Languages:** C, Golang, Java, MATLAB, Python, R, RISC-V, Scheme, Snap, SQL
- **Frameworks/Libraries:** Matplotlib, Numpy, Pandas, Plotly, PyTorch, scikit-learn, Seaborn, TensorFlow
- **Tools:** Docker, gdb, git, Logism, Valgrind
- **Mathematics:** Abstract Algebra, Complexity Theory, Cryptography, Discrete Mathematics, Linear Algebra, Linear Programming, Logic, Numerical Analysis, Real Analysis
- **Other:** Bilingual (English/Vietnamese), Public Speaking, LaTeX, TikZ