**Instructor** Yosi Shibberu and Matt Boutell

## Contact Info

	Office	Phone	Email
Shibberu	DL205	812-877-8123	shibberu@rose-hulman.edu
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Office Hours To be arranged.

## **Grading Policy**

		A	90% and above
Project	30%	B+	85%
Two Tests	30%	В	80%
Quizzes	10%	C+	75%
Lessons	10%	$\mathbf{C}$	70%
Homework	20%	D+	65%
Total	100%	D	60%
		${ m F}$	below $60\%$

Homework Policy Late homework will not be accepted.

**Lessons Policy** Lessons are in class assignments. You have two class days to complete a Lesson. Lessons are collected at random on Fridays.

**Grading Error** If you suspect a grading error has been made, identify the error in writing and submit the assignment to me for re-grading. Grading errors should be reported promptly.

**Laptop/Cellphone Policy** Web surfing, email browsing, gaming, using cell phones and mobile devices, are not permitted during class.

**Attendance Policy** After five absences, your final grade will be reduced by half a grade for every additional *unexcused* absence.

Extra Credit As a rule, we do *not* provide extra credit as a means for improving a low test score.

Honor Code All students are expected to abide by Rose-Hulman's honor code.

**Learning Outcomes** Students will be able to write programs that learn from data how to accomplish a specific task. In particular students will be able to

- 1. identify relevant data features.
- 2. engineer new data features.
- 3. optimize hyper-parameters of classifiers/regressors to prevent over/under fitting.
- 4. use metrics to evaluate the performance of classifiers/regressors.
- 5. use data bootstrapping to construct confidence intervals for predictions of classifiers/regressors.

**Textbook** An Introduction to Statistical Learning by G. James, D. Witten, T. Hastie and R. Tibshirani.