IREM ÖZ

EMAIL
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DEMO REEL
tinyurl.com/iremozdemoreel

EDUCATION

University of Pennsylvania, May 2017, GPA: 3.93

BSE in Digital Media Design

Relevant Coursework:
Software Engineering (**Java, Android**), Algorithms,
Advanced 3D modelling (**Maya**), Intro to CG (**C++**)

ETH Zurich, Fall 2015, Exchange Semester

Relevant Coursework:
**Computer Graphics (C++),
Physically Based Simulations (C++),
Human Computer Interaction**

EXPERIENCE

CG Engineering Intern
Penrose Studios
San Francisco, CA
Summer 2016

- Worked with VR and **Unreal Engine** to develop VR animation tools
- Developed prototypes for VR and AR with small teams of engineers and artists

Teaching Assistant
Phys Based Animations
University of Pennsylvania
Spring 2016

- Clarified student issues with numerical integration and fluid solvers
- Guided debugging with Houdini software with students at weekly office hours
- Gave feedback to students on project demos

Red Labs Intern
Red Online Marketing Group
Philadelphia, PA
Summer 2015

- Solved bugs in company products (**Python**, **Flask** and **JavaScript**)
- Improved product maintainability by replacing NOsql database with SQL (**Java**)
- Made website to opensource internal company projects

Teaching Assistant
Prog Lang & Tech
University of Pennsylvania
Fall 2014 - Spring 2015

- Taught recitation classes for Programming Languages & Techniques
- Helped students with homework and debugging (**OCaml** and **Java**)
- Graded student coursework and gave feedback on coding style

Game Development Intern
METUTECH-ATOM
Ankara, Turkey
Summer 2014

- Learned **Unity** and **C#** in the Animation and Game Development Center
- Improved game development and design skills through individual project
- See PROJECTS section under UNGREEN for work

Co-President
Penn Taekwondo Club
University of Pennsylvania
Spring 2015 - Spring 2016

- Increased club participation with social activities
- Organized board meetings and scheduled semester activities
- Arranged room reservations, practice times and tournament trips

PROJECTS

Water Vortex
C++
Fall 2015

- An SPH solver for fluids, final project for physically based simulations
- Uses openmp for multi-threading and grid optimization for neighbor search
- Particle collisions with rigidbody surfaces

Renderer
C++, Nori
Fall 2015

- Extended Nori framework with volume, materials and integrators
- Wrote multiple importance sampling **path tracer**
- Implemented **volumetric path tracing** and **photon mapping**

MiniMaya
C++, Qt
Spring 2015

- A 3D modeling interface with geometry import, export and manipulation
- Implemented JSON joint import weighted skin binding
- Catmull-Clark subdivision with half-edge data structure

LIMBIO
Node.js, Myo
PennApps Winter 2015

- An app that encourages regular exercise for patients with carpal tunnel
- Keeps track of repetitions using Myo arm band and sends reports
- Placed **Top 30 Hacks** in PennApps Winter 2015

UNGREEN
Unity, C#
July 2014

- A mobile game in which user interacts with particle-based environment
- Developed algorithm to simulate mechancis of particle behaviour
- Designed environment assets in Illustrator