

# Aylin Dincer

aylin.s.dincer@gmail.com  
(610) 945 7250

AylinDincer.com  
github.com/aylindincer

## EDUCATION

**Bucknell University** | *Lewisburg, PA* **2014**

BA in Physics

**Montgomery County Community College** | *Blue Bell, PA* **2011**

AA in Liberal Studies

## WORK EXPERIENCE

**Washington University School of Medicine** | *St. Louis, MO* **May 2016 - Current**

**Senior Data Engineer** | *2020 – Current*

- Developed ETL workflow and implemented a centralized database infrastructure to replace a siloed database for over 50,000 human brain imaging scans and its processed data.
- Lead a multi-functional team to effectively coordinate and document internal data workflows between clinicians, data scientists, and IT and meet with end users on data sharing impact.
- Support research projects via data extractions (REST API and XML), joining longitudinal data sets with thousands of clinical, demographics, genetic, and imaging records based on specific criteria, and reviewing manuscripts.
- Work with a team of data scientists to streamline data pipelines to process inconsistent MRI scan protocols. Create training documentation for processing and quality control standards.

**Senior Data Analyst** | *2018 – 2020*

- Performed predictive modeling to detect Alzheimer disease before clinical diagnosis utilizing Python for data extraction and R for statistical analysis. Published first-author manuscript to peer-reviewed journal<sup>1</sup>.
- Created Tableau dashboard and wrote calculated fields to visualize biomarker measures for quality control.
- Developed validation plan and integrated new data processing software within historical and ongoing imaging data from 12+ different countries resulting in a 67% time savings and a \$80,000 cost reduction.

**Research Assistant** | *2017*

- Define and oversee data processing & quality control standards; deliver on-time, high-quality, results while managing stakeholders' expectations for Alzheimer disease research studies and clinical trials.
- Designed, maintained, and instruct a software certification workshop for research collaborators and business partners.

**Research Technician II** | *2016*

- Performed image processing and quality control for ongoing multi-center research and clinical trials. Provided weekly project status reports to internal stakeholders.

**Washington University Courses:** Data Visualization with Tableau (2019); Data Science with Python (2019); Programming with Python (2018).

**Freelance Web Designer**

**Nov. 2020 – Current**

- Work with a team to build wireframes and prototypes in Figma, create custom professional web designs in Webflow and Wordpress, design custom logos, and edit photos for portfolios, API platforms, and e-commerce websites.

**Pennsylvania State University** | *State College, PA*

**Feb. 2015 – March 2016**

**Research Technician I**

- Designed and built equipment using SolidWorks and wrote graphical programming scripts in LabVIEW to integrate hardware for data acquisition.
- Constructed electrodes, performed rodent craniotomy and perfusion surgeries, and carried out laboratory experiments. Performed data analyses in Matlab.

## TECHNICAL SKILLS

**Programming:** R (*dplyr, data.table, ggplot2, patchwork, lme4, pROC, stringr, psych*), Python3 (*scikit-learn, os, argparse, pandas, NumPy, matplotlib, re, plotly, beautifulsoup*), SQL, Bash, Git, LabVIEW.

**Software:** Tableau, Jupyter Notebook, SolidWorks, Webflow, Wordpress, GIMP, Figma

# Aylin Dincer

aylin.s.dincer@gmail.com  
(610) 945 7250

AylinDincer.com  
github.com/aylindincer

## SELECTED PEER-REVIEWED PUBLICATIONS

<sup>1</sup>**Dincer A**, Gordon BA, Hari-Raj A, Keefe SJ, Flores S, ..., Benzinger TLS (2020). Comparing cortical signatures of atrophy between late-onset and autosomal dominant Alzheimer disease. *NeuroImage: Clinical*.

Vermunt L, Dicks E, Wang G, **Dincer A**, ..., Gordon BA (2020). Single-subject grey matter network trajectories over the disease course of autosomal dominant Alzheimer disease. *Brain Communications*.

Thirunavu V, McCullough A, Su Y, Flores S, **Dincer A**, ..., Brian A Gordon (2019). Higher Body Mass Index Is Associated with Lower Cortical Amyloid- $\beta$  Burden in Cognitively Normal Individuals in Late-Life. *Journal of Alzheimer's Disease*.

Gordon BA, Blazey TM, Christensen J, **Dincer A**, ..., Benzinger TLS (2019). Tau PET in autosomal dominant Alzheimer's disease: relationship with cognition, dementia and other biomarkers. *Brain*.

Gordon BA, Blazey TM, Su Y, Hari-Raj A, **Dincer A**, ..., Benzinger TLS (2018). Spatial patterns of neuroimaging biomarker change in individuals from families with autosomal dominant Alzheimer's disease: a longitudinal study. *The Lancet Neurology*.

## AWARDS & HONORS

Recipient of full-tuition Jack Kent Cooke Scholarship / 2011 - 2014

Co-Author Recipient of the World Congress of Biomechanics Research Award | 2014

Susquehanna Valley Undergraduate Symposium Research Award | 2013

Phi Theta Kappa International Honor Society | Montgomery County Community College | 2010

Who's Who Among Students in American Colleges | Montgomery County Community College | 2009

**Professional societies:** Alzheimer's Association International Society to Advance Alzheimer's Research and Treatment Member (2018-2021)